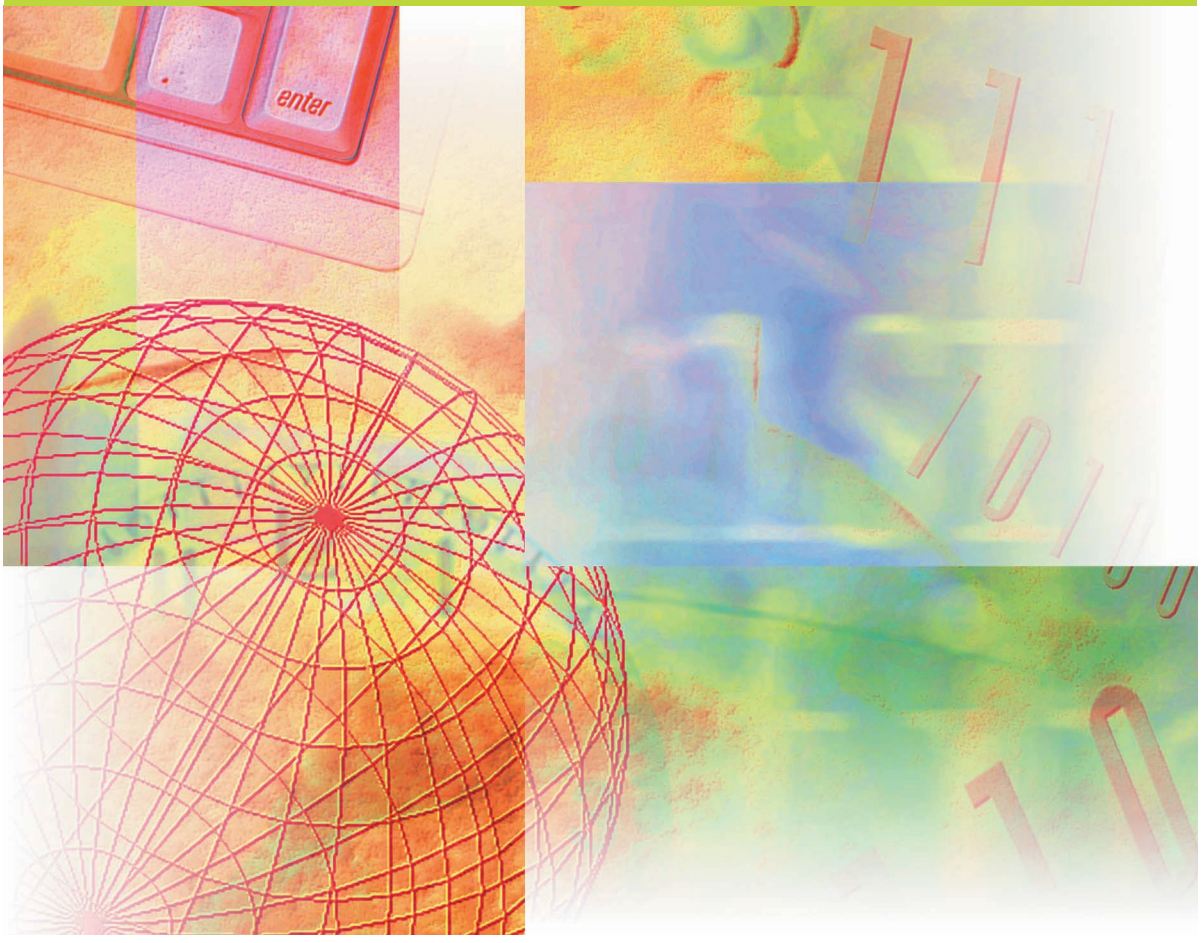
Canon

CLC3220/iRC3220N

Network Guide



Please read this guide before operating this equipment.
After you finish reading this guide, store it in a safe place for future reference.

ENG

CLC3220/iR C3220N
Network Guide

Manuals for the Machine

The manuals for this machine are divided as follows. Please refer to them for detailed information.
The manuals supplied with optional equipment are included in the list below. Depending on the system configuration and product purchased, some manuals may not be needed.

Guides with this symbol are printed manuals.

Guides with this symbol are PDF manuals included on the accompanying CD-ROM.

• **Basic Information**	**User's Guide**	
• **Basic Operations** • **Troubleshooting**	**Reference Guide**	CD-ROM
• **Copying and Mail Box Instructions**	**Copying and Mail Box Guide**	CD-ROM
• **Sending and Fax Instructions**	**Sending and Facsimile Guide**	CD-ROM
• **Setting Up the Network Connection and Installing the CD-ROM Software**	**Network Quick Start Guide**	
• **Remote User Interface Instructions**	**Remote UI Guide**	CD-ROM
• **Network Connectivity and Setup Instructions**	**Network Guide (This Document)**	CD-ROM
• **Color Network ScanGear Installation and Instructions**	**Color Network ScanGear User's Guide**	CD-ROM
• **PS/PCL/UFR Printer Instructions**	**PS/PCL/UFR Printer Guide**	CD-ROM
• **PCL Printer Driver Installation and Instructions**	**PCL Driver Guide**	CD-ROM
• **PS Printer Driver Installation and Instructions**	**PS Driver Guide**	CD-ROM
• **Mac OS X PS Printer Driver Installation and Instructions**	**Mac PS Driver Guide**	CD-ROM
• **UFR Printer Driver Installation and Instructions**	**UFR Driver Guide**	CD-ROM

- **Fax Driver Installation and Instructions**

Fax Driver Guide

- **Installing MEAP Applications and Using the Login Service**

MEAP SMS Administrator Guide

To view the manual in PDF format, Adobe Reader/Adobe Acrobat Reader is required. If Adobe Reader/Adobe Acrobat Reader is not installed on your system, please download it from the Adobe Systems Incorporated website.

How This Manual Is Organized

Chapter 1 Before You Start

Chapter 2 Settings Common to the Network Protocols

Chapter 3 Using a TCP/IP Network

Chapter 4 Using a NetWare Network (Windows)

Chapter 5 Using a NetBIOS Network

Chapter 6 Using an AppleTalk Network (Macintosh)

Chapter 7 Using the Network and Device Settings with Utilities

Chapter 8 Troubleshooting

Chapter 9 Appendix

Includes the network settings, specifications, and index.

Considerable effort has been made to ensure that this manual is free of inaccuracies and omissions. However, as we are constantly improving our products, if you need an exact specification, please contact Canon.

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Preface

Thank you for purchasing the Canon CLC3220/iR C3220N. Please read this manual thoroughly before operating the product in order to familiarize yourself with its capabilities, and to make the most of its many functions. After reading this manual, store it in a safe place for future reference.

How To Use This Manual

Symbols Used in This Manual

The following symbols are used in this manual to explain procedures, restrictions, handling precautions, and instructions that should be observed for safety.

CAUTION	Indicates a caution concerning operations that may lead to injury to persons, or damage to property if not performed correctly. In order to use the machine safely, always pay attention to these cautions.
IMPORTANT	Indicates operational requirements and restrictions. Be sure to read these items carefully in order to operate the product correctly, and to avoid damage to the product.
NOTE	Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.

Keys and Buttons Used in This Manual

The following symbols and key/button names are a few examples of how keys and buttons to be clicked or pressed are expressed in this manual:

- Control Panel Keys: <Key icon>

  Examples:

- Touch Panel Display Keys: [Key Name]

  Examples: [Cancel]

  [Done]

- Buttons on Computer Operation Screens: [Button Name]

  Examples: [OK]

  [Add]

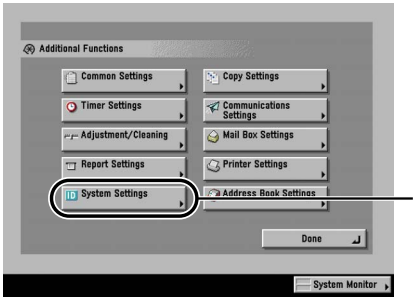
Displays Used in This Manual

Screen shots of the touch panel display used in this manual may differ from the ones you actually see, depending on the operating system and options that come with your machine.

The keys or buttons which you should click or press are marked with a ⬭, as shown below.

When multiple buttons or keys can be clicked or pressed, they will be highlighted and mentioned in the order in which they should be clicked or pressed.

2 **Press [System Settings].**



Press this key for operation.

Abbreviations Used in This Manual

In this manual, product names and model names are abbreviated as follows:

Microsoft® Windows® 95 operating system:	Windows 95
Microsoft® Windows® 98 operating system:	Windows 98
Microsoft® Windows® Millennium Edition operating system:	Windows Me
Microsoft® Windows NT® operating system:	Windows NT
Microsoft® Windows® 2000 operating system:	Windows 2000
Microsoft® Windows® XP operating system:	Windows XP
Microsoft® Windows Server™ 2003 operating system:	Windows Server 2003
Microsoft® Windows® operating system:	Windows
PostScript® 3 emulation:	PS
Novell NetWare®:	NetWare

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1 CHAPTER

Before You Start

This chapter describes what you need to know before you start using the machine, including the network environments with which the machine is compatible, and how to check the network environment you are using.

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- Sample UNIX Network 1-11
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Optional Equipment and System Environment Requirements

This section describes the system environments with which the machine is compatible.

Printing or Sending a Fax from a Computer

Optional Equipment Requirements

The following optional equipment is required for printing or sending a fax from a computer:

■ Printing

- If you are using the iR C3220N
  - The optional equipment is unnecessary
- If you are using the CLC3220 (either one of the following optional equipment)
  - Color Network Multi-PDL Printer Kit (If you want to use the UFR/PS/PCL printer driver)
  - Color Network Printer Unit (If you want to use the PS printer driver)

■ Sending a Fax

- Super G3 FAX Board
- Resolution Switching Board
- Color Image Reader

IMPORTANT

For more information on the equipment needed, consult your local authorized Canon dealer.

System Environment Requirements

The following network and system environments are compatible when printing or sending a fax from a computer:

■ With a TCP/IP Network:

- Compatible OS
  - Microsoft Windows 98/Me
  - Microsoft Windows NT Server 4.0
  - Microsoft Windows NT Workstation 4.0
  - Microsoft Windows 2000 Server
  - Microsoft Windows 2000 Professional
  - Microsoft Windows XP Professional
  - Microsoft Windows XP Home Edition
  - Microsoft Windows Server 2003
  - Solaris Version 1.1x (SunOS Version 4.1x) or later
  - Solaris Version 2.5x (SunOS Version 5.5x) or later
- Compatible Computers
  - Windows; IBM PC/compatibles

■ With a NetBIOS Network:

- Compatible OS
  - Microsoft Windows 98/Me
  - Microsoft Windows NT Server 4.0
  - Microsoft Windows NT Workstation 4.0
  - Microsoft Windows 2000 Server
  - Microsoft Windows 2000 Professional
  - Microsoft Windows XP Professional
  - Microsoft Windows XP Home Edition
  - Microsoft Windows Server 2003
- Compatible Protocol
  - NetBIOS over TCP/IP
- Compatible Computers
  - IBM PC/compatibles

■ With a NetWare Network:

- Compatible Servers
  - Novell NetWare Version 3.2/4.1/4.11/4.2/5/5.1/6
- Compatible Clients
  - Microsoft Windows 98/Me
  - Microsoft Windows NT Server 4.0
  - Microsoft Windows NT Workstation 4.0
  - Microsoft Windows 2000 Server
  - Microsoft Windows 2000 Professional
  - Microsoft Windows XP Professional
  - Microsoft Windows XP Home Edition
  - Microsoft Windows Server 2003
- Compatible Computers
  - IBM PC/compatibles

■ With an AppleTalk Network:

Compatible AppleTalk:EtherTalk Phase 2

See the *Driver Guide* for compatible operating systems and computers.

■ With a Server-Based Computing Environment:

- Compatible Windows Terminal Server (Services)
  - Microsoft WIndows NT 4.0 Terminal Server Edition
  - Microsoft Windows 2000 Server
  - Microsoft Windows Server 2003
- Compatible Software
  - Citrix MetaFrame 1.8
  - Citrix MetaFrame XP

IMPORTANT

- *If you are using the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit for details on the system environment requirements.*
- *If you are using Windows NT 4.0, you need to install Service Pack 6a or later.*
- *If you are using Windows 2000, you need to install Service Pack 2 or later.*
- *The machine does not support Macintosh LocalTalk networks.*

Optional Equipment Requirements

The following optional equipments are confirmed for using the e-mail/I-fax functions:

- Color Universal Send Kit
- Resolution Switching Board
- Color Image Reader

IMPORTANT

For more information on the equipment needed, consult your local authorized Canon dealer.

System Environment Requirements

The following system environments are confirmed for using the e-mail/I-fax functions.

- Compatible mail forwarding server software
  - Sendmail 8.93 or later (UNIX)
  - Microsoft Exchange Server (Windows)
    Microsoft Exchange Server 5.5 + Service Pack 1 or later
  - Lotus Domino R4.6 or later (Windows)
- Compatible mail receiving server software
  - Qpopper 2.53 or later (UNIX)
  - Microsoft Exchange Server (Windows)
    Microsoft Exchange Server 5.5 + Service Pack 1 or later
  - Lotus Domino R4.6 or later (Windows)

IMPORTANT

- *If you are using Windows NT 4.0, you need to install Service Pack 6a or later.*
- *If you are using Windows 2000, you need to install Service Pack 2 or later.*

NOTE

The machine sends e-mail or I-fax messages to mail servers using SMTP.
The machine can receive incoming messages from a mail server using the POP3 protocol or directly using the machine's own SMTP receiving function.
If the latter method is used, it is not necessary for the mail server to support the POP3 protocol. (The machine can receive I-fax images and error e-mail messages sent when errors occur during communication, but not any other type of e-mail.)

Sending Data

Optional Equipment Requirements

The following optional equipment is required for sending data:

- Color Universal Send Kit
- Resolution Switching Board
- Color Image Reader

IMPORTANT

For more information on the equipment needed, consult your local authorized Canon dealer.

System Environment Requirements

The following network and system environments apply when sending data from the machine to a file server, depending on the type of network used:

■ With a TCP/IP Network (Using FTP):

- Compatible servers
  - Microsoft Windows NT Server 4.0 and Internet Information Server 4.0
  - Microsoft Windows 2000 Server and Internet Information Services 5.0
  - Microsoft Windows XP Professional and Internet Information Services 5.1
  - Microsoft Windows Server 2003 and Internet Information Services 6.0
  - Solaris Version 2.6 or later
  - Red Hat Linux 7.2 or later
  - Mac OS X
  - FTP server for iW Gateway
- Compatible protocol
  - TCP/IP

■ With a NetBIOS Network:

- Compatible servers
  - Microsoft Windows 95/98/Me
  - Microsoft Windows NT Server 4.0
  - Microsoft Windows NT Workstation 4.0
  - Microsoft Windows 2000 Server
  - Microsoft Windows 2000 Professional
  - Microsoft Windows XP Professional
  - Microsoft Windows XP Home Edition
  - Microsoft Windows Server 2003
- Compatible server software for sending data
  - Samba 2.2.8a or later (UNIX/Linux)
- Compatible protocol
  - NetBIOS over TCP/IP

■ With a NetWare Network:

- Compatible server
  - Novell NetWare Version 3.2/4.11/4.2/5/5.1/6
- Compatible protocol
  - IPX

IMPORTANT

- *If you are using the optional Color Universal Send Kit, the optional Resolution Switching Board, and the optional Color Image Reader with the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit for details on the system environment requirements.*
- *If you are using Windows NT 4.0, you need to install Service Pack 6a or later.*
- *If you are using Windows 2000, you need to install Service Pack 2 or later.*

Checking Your Network Environment

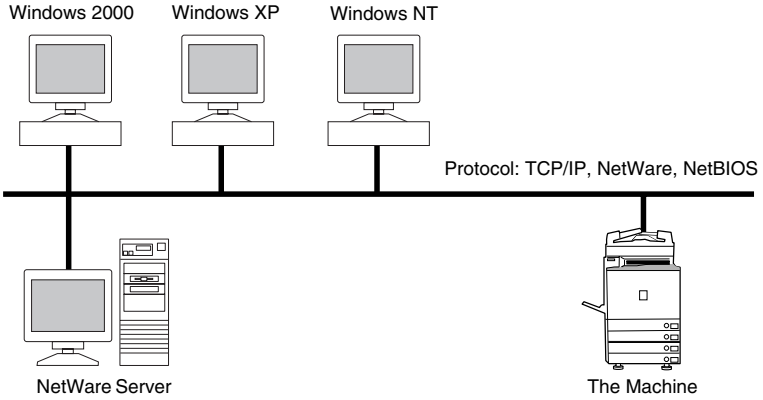
Refer to the following diagram examples to confirm the network environment that is connected to the machine, and then perform the necessary operations for that environment.

If you are using the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit.

Sample Windows Network

With a NetWare Server

In a network environment like the one below, a TCP/IP, NetWare, or NetBIOS (NetBIOS over TCP/IP) protocol can be used. Multiple protocols can also be used at the same time.
To use the e-mail/I-fax function, a TCP/IP protocol is required.



After configuring the settings in accordance with Chapter 2, "Settings Common to the Network Protocols," see the following depending on the protocol:

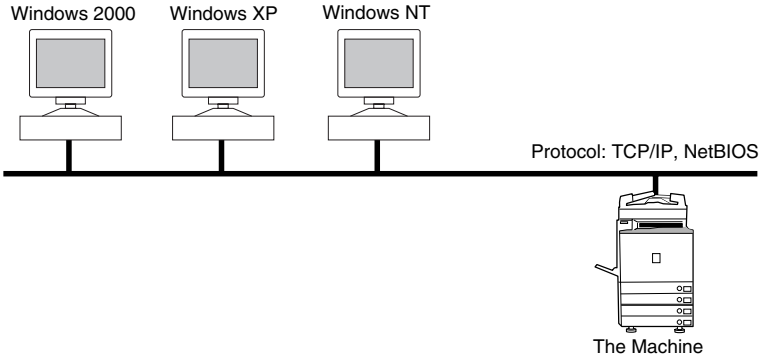
- Chapter 3, "Using a TCP/IP Network"
- Chapter 4, "Using a NetWare Network (Windows)"
- Chapter 5, "Using a NetBIOS Network"

IMPORTANT

- *To use the e-mail/I-fax functions, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *The machine does not support NetBEUI.*

Without a NetWare Server

In a network environment like the one below, either TCP/IP or NetBIOS (NetBIOS over TCP/IP) protocol can be used. Multiple protocols can also be used at the same time.



After configuring the settings in accordance with Chapter 2, "Settings Common to the Network Protocols," see the following depending on the protocol:

- Chapter 3, "Using a TCP/IP Network"
- Chapter 5, "Using a NetBIOS Network"

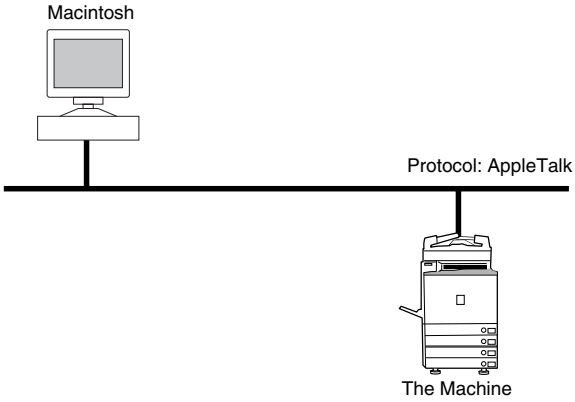
IMPORTANT

The machine does not support NetBEUI.

Sample Macintosh Network

With Macintosh computers, the AppleTalk (EtherTalk) protocol is used for printing.

To use the e-mail/I-fax function or to send data, a TCP/IP protocol is required.



After configuring the settings in accordance with Chapter 2, "Settings Common to the Network Protocols," see the following, depending on the protocol:

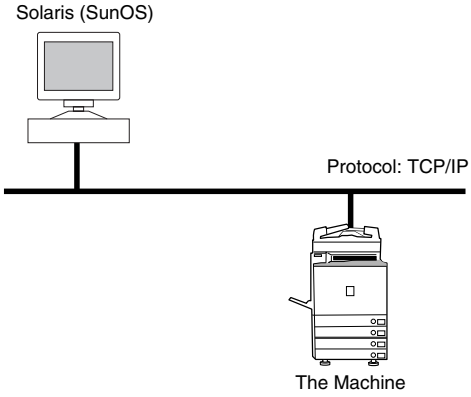
- Chapter 6, "Using an AppleTalk Network (Macintosh)"
- Chapter 3, "Using a TCP/IP Network"

IMPORTANT

To use the e-mail/I-fax functions, or data sending functions for the machine, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

Sample UNIX Network

With UNIX computers, the TCP/IP protocol is used.



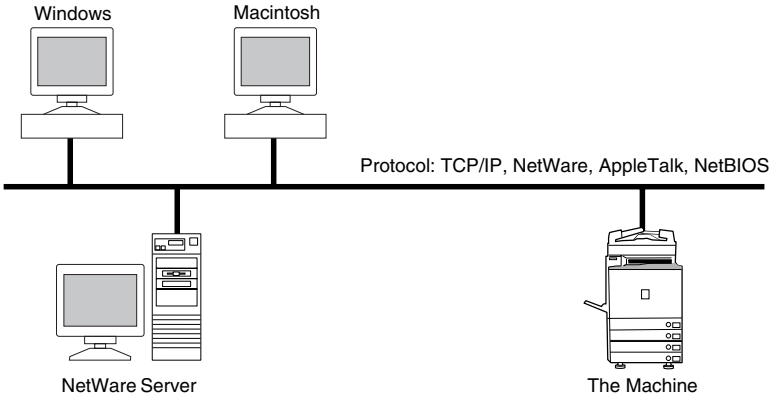
After configuring the settings in accordance with Chapter 2, "Settings Common to the Network Protocols," see the following:

- Chapter 3, "Using a TCP/IP Network"

Using a Network with Various Types of Computers

If there are various types of computers on the network, network operations depend on the type of computer being used.
For example, if you are using Windows XP and Macintosh computers, you will need to specify the settings described in both "Sample Windows Network," on p. 1-8, and "Sample Macintosh Network," on p. 1-10.

To use the e-mail/I-fax function, a TCP/IP protocol is required.
To use the data sending function, a TCP/IP, NetWare, or NetBIOS protocol is required.



After configuring the settings in accordance with Chapter 2, "Settings Common to the Network Protocols," see the following depending on the protocol:

- Chapter 3, "Using a TCP/IP Network"
- Chapter 4, "Using a NetWare Network (Windows)"
- Chapter 5, "Using a NetBIOS Network"

IMPORTANT

To use the e-mail/I-fax functions, or data sending functions for the machine, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

Settings Common to the Network Protocols

2
CHAPTER

This chapter describes setting items common to the network protocols, which are required for using the machine in a network environment. Before specifying the settings of the desired protocol (Chapters 3 to 6), be sure to set items explained in this chapter. (If you are using the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit.)

Network Environment Setup Procedures 2-2
Connecting the Machine to a Computer or Network 2-3
Connecting to a Network 2-4
Connecting to a USB Interface (Optional) 2-7
Interface Settings 2-9
Settings from the Control Panel 2-10
Communication Environment Setup 2-17
Settings from the Control Panel 2-17

Network Environment Setup Procedures

Before using the machine in a network environment, it is necessary to perform the following setup procedures.

1 **Network Cable Connection (See "Connecting the Machine to a Computer or Network," on p. 2-3.)**

Connect the machine to the network using the network cables.

2 **Interface Settings (See "Interface Settings," on p. 2-9.)**

Specify the interface settings for communication between the machine and computers on your network. To specify the settings, use:

- The machine's control panel
- A web browser (Remote UI)

3 **Communication Environment Setup (See "Communication Environment Setup," on p. 2-17.)**

Set up a configuration for communication between the machine and computers on your network.

IMPORTANT

If you configure the interface settings for the first time, use the control panel of this machine. After configuring the TCP/IP settings, you can change the content by using a web browser (Remote UI).

Connecting the Machine to a Computer or Network

This section describes how to connect the machine to a computer or network, and describes the types of connection and cables you can use.

The machine can be connected to a computer or network with a USB cable, 10Base-T/100Base-TX Ethernet cable, or Token Ring cable.

CAUTION

When connecting the interface cable or network cable, be sure to observe the following precautions in order to avoid electrical shock.

- **Turn the main power switch to OFF before unplugging the power cable from the power supply. (See Chapter 1, "Before You Start Using This Machine," in the *Reference Guide*.)**
- **Turn OFF the computer and unplug its power cord from the power supply.**

IMPORTANT

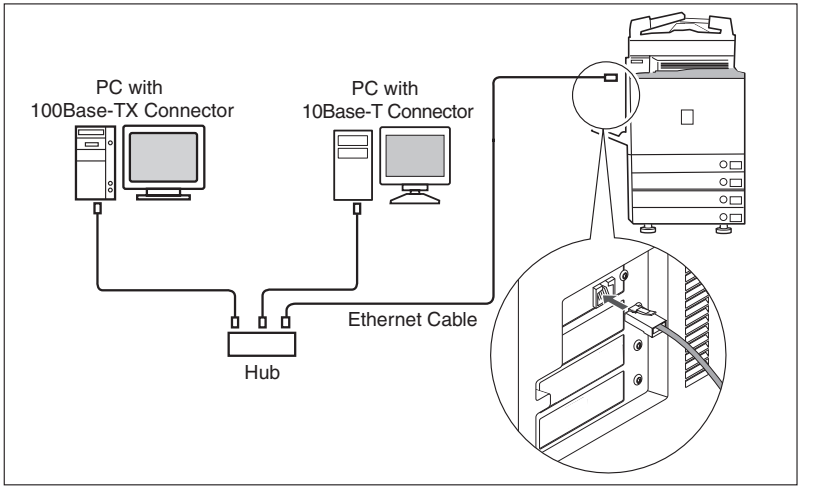
- *External USB devices (i.e. memory, keyboard, mouse, etc.) are not supported by the optional USB Interface Board.*
- *A USB cable or a network cable are not included in this package. Please obtain a suitable cable for your computer or network.*
- *The machine supports both Ethernet and Token Ring networks; however, you cannot use the machine to connect to both types of networks at the same time.*
- *If the machine has both network boards (Ethernet and Token Ring) installed, the Token Ring has priority over the Ethernet.*
- *You cannot use Ethernet and Token Ring at the same time. When a Token Ring Board is installed in the machine, you cannot use Ethernet. To use Ethernet, you need to remove the Token Ring Board from the machine.*
- *The Token Ring Board and the USB Interface Board cannot be installed together.*
- *For more information on the USB Interface Board and the Token Ring Network I/F Adapter, consult your local authorized Canon dealer.*

Connecting to a Network

The machine supports TCP/IP, AppleTalk, and NetWare, which enables it to be used by Windows, Macintosh, UNIX, and Linux computers. It also has a 10Base-T/100Base-TX connector and optional Token Ring connector that can be used on most LANs.

Using Ethernet

Connect the machine's RJ-45 connector to a hub port using a Category 5 twisted pair LAN cable.



IMPORTANT

- *The machine supports both Ethernet and Token Ring networks; however, you cannot use the machine to connect to both types of network at the same time.*
- *If the machine has both network boards (Ethernet and Token Ring) installed, you need to remove the Token Ring Board. For more information, consult your local authorized Canon dealer.*
- *You cannot use the machine as a repeater, bridge, or gateway.*
- *If two or more machines are on an AppleTalk network, they should be switched 'on' 10 seconds or more apart.*

NOTE

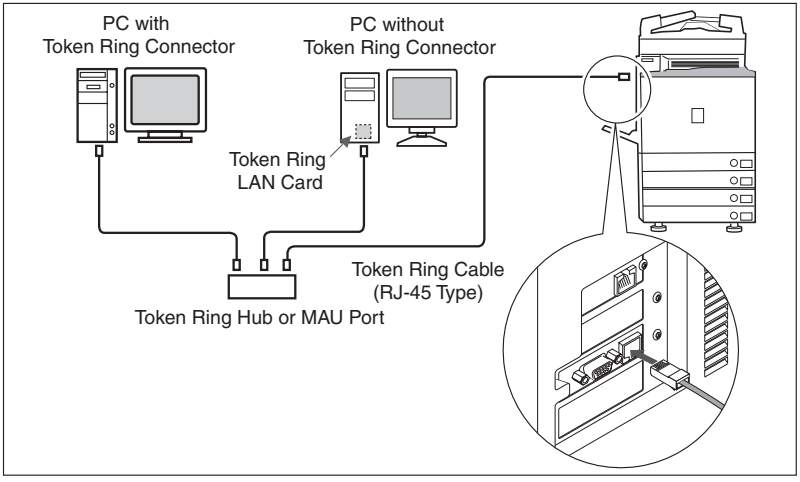
- *The machine can automatically detect the type of Ethernet (10Base-T or 100Base-TX).*
- *If you are using a mixed 10 Base-T/100 Base-TX environment, devices on the network (hubs, routers, etc.) must support the mixed environment. For more information, consult your local authorized Canon dealer.*
- *After connecting the network cable, perform the following operations. (For more information, see the relevant descriptions.)*
  - *Set the date and time, and System Manager settings. (See Chapter 6, "System Manager Settings," in the Reference Guide.)*
  - *Set the network settings.*
  - *Install a printer driver if necessary. (See the PCL Driver Guide, the PS Driver Guide, or the UFR Driver Guide.)*

Using Token Ring (Optional)

The optional Token Ring Board has two connectors. One is an RJ-45 connector, and the other is a DB9 connector. Use only one of these connectors to connect to the network. Do not connect anything to the other connector. You cannot use both connectors at the same time.

■ Connect Using an RJ-45 Type Cable

Connect the RJ-45 connector of the optional Token Ring Board that is installed on the machine to a hub or MAU port using a Category 5 cable. Every computer connected to this network must have Token Ring capability.

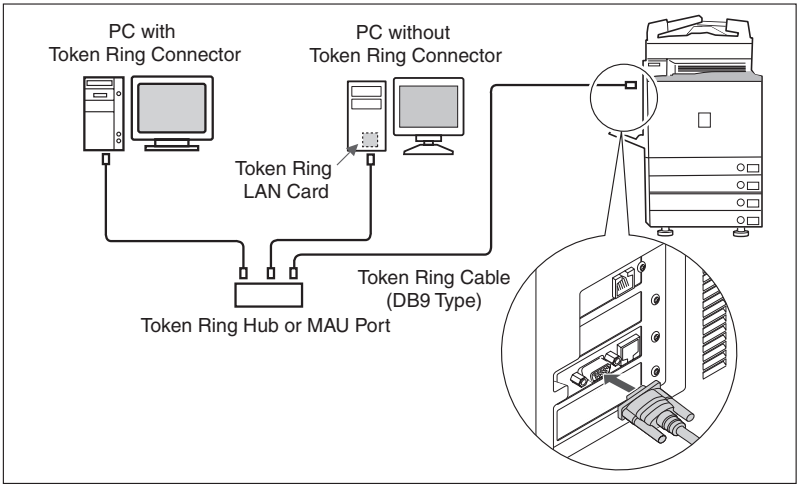


IMPORTANT

- *The use of an STP cable is required to comply with the limits for a Class B digital device, pursuant to EN55022:1998 when you connect the machine to a Token Ring network.*
- *If the machine has both network boards (Ethernet and Token Ring) installed, the Token Ring has priority over the Ethernet.*
- *All devices connected to the network, such as hubs, Token Ring cables, Token Ring cards, etc., must support Token Ring. For more information, consult your local authorized Canon dealer.*

■ Connect Using a DB9 Type Cable

Connect the DB9 connector of the optional Token Ring Board that is installed on the machine to a hub or MAU port using an IBM Type 1 or Type 1A STP cable. Every computer connected to this network must have Token Ring capability.

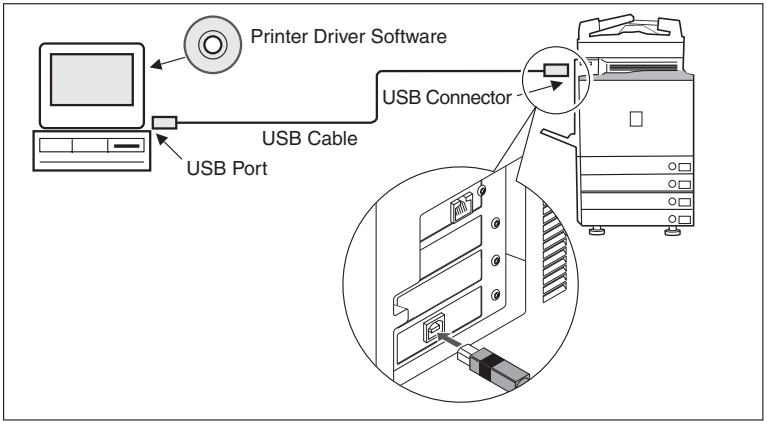


IMPORTANT

- *The use of an STP cable is required to comply with the limits for a Class B digital device, pursuant to EN55022:1998 when you connect the machine to a Token Ring network.*
- *If the machine has both network boards (Ethernet and Token Ring) installed, the Token Ring has priority over the Ethernet.*
- *All devices connected to the network (such as hubs, Token Ring cables, Token Ring cards, etc.) must support Token Ring. For more information, consult your local authorized Canon dealer.*

Connecting to a USB Interface (Optional)

If you install a USB Interface Board on the machine, you can connect the machine to a computer with a USB port via a USB cable. The machine is USB Full Speed (USB 1.1 equivalent) compatible. The printer drivers, USB class driver, and utility that matches the operating system on your computer will be installed. For more information on installing the printer driver through a USB connection, see Chapter 2, "Getting Started," in the *PCL Driver Guide*, the *PS Driver Guide*, or the *UFR Driver Guide*.



CAUTION

If you connect or disconnect the USB cable while the main power switch is ON, do not touch the metal parts around the connector, as this may result in electrical shock.

IMPORTANT

- *Do not connect or disconnect the USB cable in the following situations, as it may cause your computer or the machine to operate poorly:*
  - *When installing the printer driver*
  - *When the computer is booting up*
  - *When printing*
- *If you disconnect the USB cable with the computer or machine's main power switch ON, always wait at least five seconds before reconnecting the cable. Immediately reconnecting the cable may cause your computer or machine to operate poorly.*

NOTE

- *If the machine is connected to a computer with a USB cable, you can print a document from your computer using the printer driver, or send a fax from your computer using the fax driver.*
- *You cannot specify the computer connected to the machine through a USB connection as a destination of the send jobs or forwarded jobs. Also, with that computer, you cannot use Remote UI and the Network Scan function.*

Interface Settings

You can specify the interface settings for the machine by using any of the following.

- The machine's control panel
- A web browser (Remote UI)

This section describes how to specify the settings from the control panel.

If you are using Ethernet to interface, see "Setting Up the Ethernet Driver," on p. 2-10.

If you are using Token Ring to interface, see "Setting Up the Token Ring," on p. 2-13.

IMPORTANT

- *If you configure the interface settings for the first time, use the control panel of this machine. After configuring the protocol settings, you can change the content by using a web browser (Remote UI).*
- *If you use Token Ring, it is necessary to purchase the optional Token Ring Network Interface Adapter.*
- *You cannot use Ethernet and Token Ring at the same time. When a Token Ring board is already installed in the machine, you cannot use Ethernet. To use Ethernet, remove the Token Ring board from the machine.*

NOTE

For instructions on how to enter settings using a web browser (Remote UI), see Chapter 3, "Customizing Settings," in the Remote UI Guide.

Settings from the Control Panel

The procedures for specifying the settings from the control panel are as follows.

IMPORTANT

Settings specified from the control panel become effective after the machine is restarted, after the procedure.

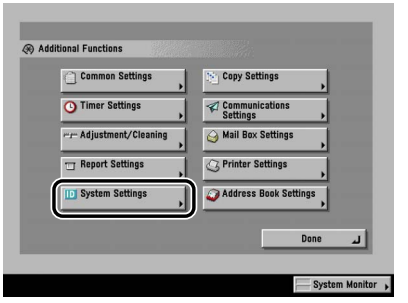
NOTE

For instructions on how to enter characters using the touch panel display, see Chapter 2, "Basic Operations," in the Reference Guide.

Setting Up the Ethernet Driver

1 **Press ⊛ .**

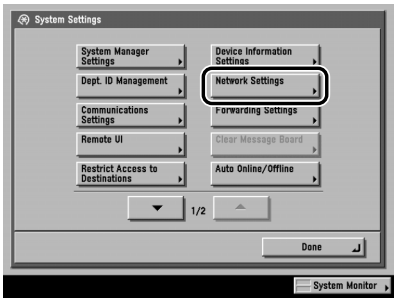
2 **Press [System Settings].**



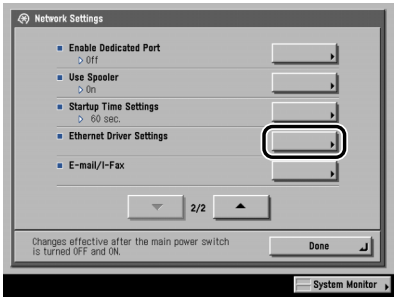
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

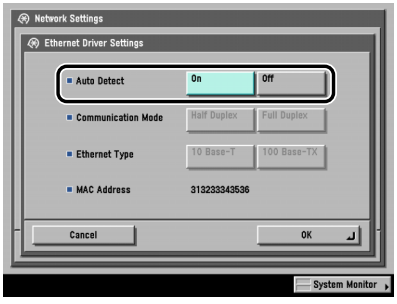
3 **Press [Network Settings].**



4 **Press [▼] or [▲] until [Ethernet Driver Settings] appears → press [Ethernet Driver Settings].**



5 **Select [On] or [Off] for <Auto Detect>.**



- **If you want the machine to automatically determine the communication mode (Half duplex/Full duplex) and Ethernet type (10Base-T/100Base-TX):**
  - ❑ Select [On].
  - ❑ Skip to step 8.
- **If you want to manually specify the communication mode (Half duplex/Full duplex) and Ethernet type (10Base-T/100Base TX):**
  - ❑ Select [Off].
  - ❑ Proceed to step 6.

IMPORTANT

If you reconnect the network cable (for example, reconnect the cable to a different Ethernet hub) with the power ON, the Auto Detect function will not work even if you set <Auto Detect> to 'On'. (Connect the cable with the power OFF.)

NOTE

The default setting is 'On'. Use the [Off] setting to specify a particular Ethernet setting.

6 Specify <Communication Mode> on the Ethernet Driver Settings screen.

- **If you want to alternately send and receive:**
  - ❑ Select [Half Duplex].
- **If you want to simultaneously send and receive:**
  - ❑ Select [Full Duplex].

7 Specify <Ethernet Type> on the Ethernet Driver Settings screen.

- **If you want to establish a 10Base-T network connection:**
  - ❑ Select [10 Base-T].
- **If you want to establish a 100Base-TX network connection:**
  - ❑ Select [100 Base-TX].

8 **Confirm the settings you specified → press [OK].**

The display returns to the Network Settings screen.

9 **Press [Done] repeatedly until the Additional Functions screen closes.**

10 **Restart the machine.**

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

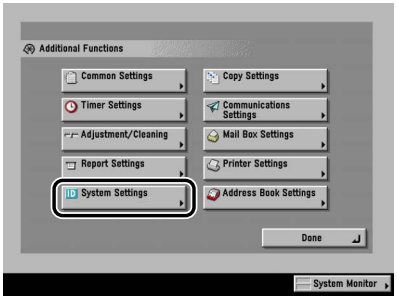
For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The Ethernet driver settings are complete.

Setting Up the Token Ring

1 **Press .**

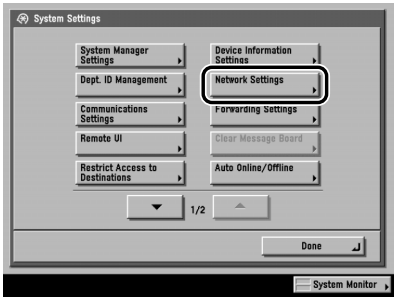
2 **Press [System Settings].**



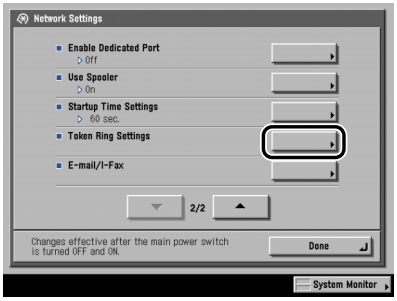
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

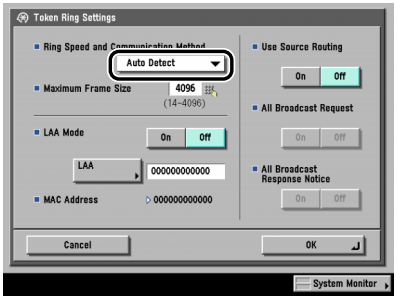
3 **Press [Network Settings].**



4 **Press [▼] or [▲] until [Token Ring Settings] appears → press [Token Ring Settings].**



5 **Select the appropriate ring speed and the communication method for your environment from the Ring Speed and Communication Method drop-down list.**



NOTE

If [Auto Detect] is selected, the ring speed and communication method are specified automatically.

6 Specify <Maximum Frame Size>.

Enter a value appropriate for your environment using ⓪ - ⑨ (numeric keys).

IMPORTANT

The machine may not work normally with the default settings. Enter a value appropriate for your environment.

7 To perform source routing, select [On] for <Use Source Routing>.

If you select [Off] for <Use Source Routing>, skip to step 10.

The allowable combinations of <Token Ring Settings>: <Use Source Routing>, <All Broadcast Request>, and <All Broadcast Response Notice> are shown below:

- Off/invalid/invalid
- On/On/invalid
- On/Off/On
- On/Off/Off

IMPORTANT

If the machine does not perform source routing correctly on a local network, select [Off] for <Use Source Routing>.

8 To perform all broadcast request, select [On] for <All Broadcast Request>.

If you select [On] for <All Broadcast Request>, skip to step 10.

9 To perform all broadcast response notice, select [On] for <All Broadcast Response Notice>.

10 Specify <LAA Mode> on the Token Ring Settings screen.

❑ If you want to use an LAA (Locally Administered Address), select [On] → press [LAA] → enter the LAA.

The allowable range for an LAA is from 40 00 00 00 00 00 to 7F FF FF FF FF FF.

IMPORTANT

- *If you use an LAA, be sure to set a valid LAA. The machine will not work normally if you use the default address without changing it.*
- *Either the MAC address or LAA is required as the Token Ring node address. If you do not set any LAA, the MAC address is used as the node address.*

NOTE

The MAC address displayed on the touch panel display is unique to the Token Ring board, and is set independently of the MAC address of the Ethernet board.

11 Confirm the settings you specified → press [OK].

The display returns to the Network Settings screen.

12 Press [Done] repeatedly until the Additional Functions screen closes.

13 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The Token Ring settings are complete.

Communication Environment Setup

To set up a configuration for communication between the machine and computers on your network, follow the procedures below.

NOTE

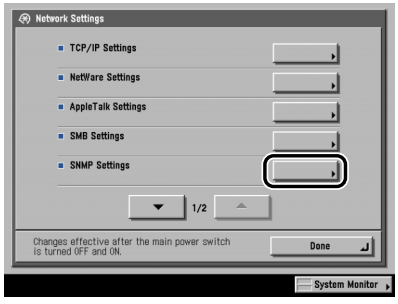
After configuring TCP/IP settings, you can change the content by using a web browser (Remote UI).

Settings from the Control Panel

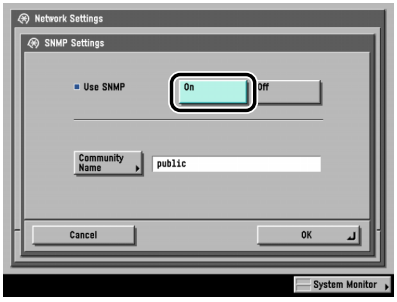
The procedure for specifying the settings from the control panel is as follows:

1 Specify the SNMP settings.

- **If you want to set or browse each item of the machine with a utility that uses SNMP to obtain information:**
  - ❑ Press ⓐ → [System Settings] → [Network Settings].
  - ❑ Press [▼] or [▲] until [SNMP Settings] appears → press [SNMP Settings].



❑ Select [On].



❑ To change [Community Name] to a name other than 'public', press [Community Name] → enter the community name.

❑ Confirm the settings you specified → press [OK].

● **If you do not want to do the above:**

❑ Press ⓚ → [System Settings] → [Network Settings].

❑ Press [▼] or [▲] until [SNMP Settings] appears → press [SNMP Settings].

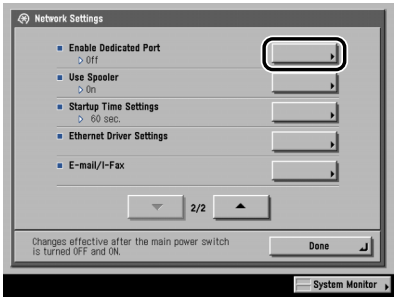
❑ Select [Off].

❑ Confirm the settings you specified → press [OK].

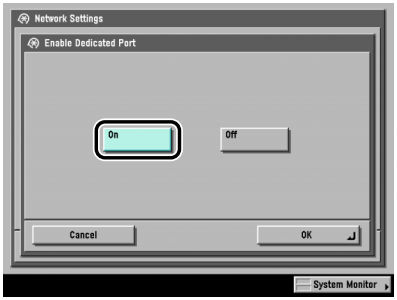
2 Specify the port setting.

● **If you want to set or browse detailed information on the machine with a Canon driver or utility:**

❑ On the Network Settings screen, press [▼] or [▲] until [Enable Dedicated Port] appears → press [Enable Dedicated Port].



❑ Select [On].



❑ Confirm the settings you specified → press [OK].

The display returns to the Network Settings screen.

● **If you do not want to do the above:**

❑ On the Network Settings screen, press [▼] or [▲] until [Enable Dedicated Port] appears → press [Enable Dedicated Port].

❑ Select [Off].

❑ Confirm the settings you specified → press [OK].

The display returns to the Network Settings screen.

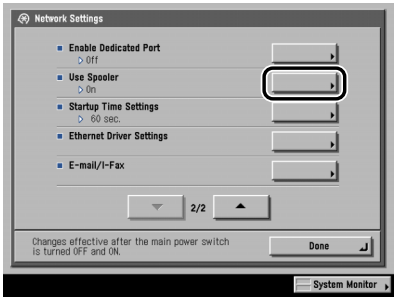
IMPORTANT

- *If you want to use a Canon driver or utility, select [On] for both [Use SNMP] and [Enable Dedicated Port].*
- *You can restrict the IP addresses of computers on which items can be set or browsed. If you restrict the IP addresses, it is not possible to set or browse detailed information concerning the machine on computers other than the ones of which the IP addresses are allowed, even if both [Use SNMP] and [Enable Dedicated Port] are [On]. For details, see "Protocol Settings," on p. 3-3.*

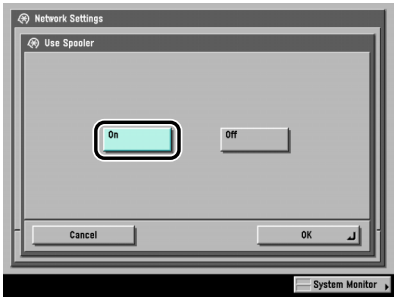
3 If you are using the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) or the optional Super G3 FAX Board, set the spooler. Otherwise, skip to step 5.

● **If you want to spool print jobs transmitted to this machine on the machine's hard disk:**

❑ On the Network Settings screen, press [▼] or [▲] until [Use Spooler] appears → press [Use Spooler].



❑ Select [On].



● **If you do not want to spool a print job on the machine's hard disk before starting printing:**

❑ On the Network Settings screen, press [▼] or [▲] until [Use Spooler] appears → press [Use Spooler].

❑ Select [Off].

IMPORTANT

If you are using the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N), take note of the following:

- *If the print job is sent from a Macintosh computer to a PS printer, you cannot specify whether to spool under this option. Spooling is determined by the name of the printer selected in the Macintosh Chooser. For more information, see "Setting Up a Computer for Printing," on p. 6-8.*

- *If you print a file in the PDF or PS format by specifying its URL on a web browser (Remote UI), the print job will always be spooled, regardless of the settings made under this option.*

NOTE

When you spool a print job on the hard disk, the time required to release a computer outputting a print job is shortened. Note that to manage a print job of the machine, you can use the touch panel display of the machine, a web browser (Remote UI), or the print queue provided with Windows to display a job list or delete a job.

4 Confirm the settings you specified → press [OK].

5 Press [Done] repeatedly until the Additional Functions screen closes.

6 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The communication environment setup is complete. Proceed to Chapters 3 to 6 depending on the protocol.

Using a TCP/IP Network

3
CHAPTER

This chapter describes the settings and procedures necessary to connect and use the machine with a TCP/IP network.

TCP/IP Network Setup Procedures 3-2
Protocol Settings 3-3
Settings from the Control Panel 3-4
Setting Up a Computer for Printing/Sending a Fax (Windows/UNIX) 3-33
Printer Connection Method (LPD/Raw) 3-35
Printer Connection Method (IPP) 3-46
Printer Connection Method (FTP) 3-51
Setting Up a Computer as a File Server 3-53
FTP Server Settings 3-54

TCP/IP Network Setup Procedures

To use a TCP/IP network, it is necessary to perform the following procedures.

1 **Protocol Settings (See "Protocol Settings," on p. 3-3.)**

Specify the protocol settings. To specify the settings, use:

- The machine's control panel
- A web browser (Remote UI)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

2 **Computer Settings for Printing/Sending a Fax (See "Setting Up a Computer for Printing/Sending a Fax (Windows/UNIX)," on p. 3-33.)**

Specify the settings for each computer you use for printing or sending a fax. (To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)

3 **Computer Settings for a File Server (See "Setting Up a Computer as a File Server," on p. 3-53.)**

Specify the settings of the computer receiving data sent from the machine. (To send data, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)

IMPORTANT

- *If you are using the optional Color Network Printer Unit, for step 2, see the manual provided with the optional Color Network Printer Unit.*
- *It is recommended that the network manager perform steps 1 and 3 above.*
- *The machine or the printer option does not come with printer driver software that can be used on a UNIX platform. (Use LPD to set up a printer in UNIX.)*
- *To print from a Macintosh, see Chapter 6, "Using an AppleTalk Network (Macintosh)."*
- *As this product does not come with fax driver software for the UNIX platform, it is not possible to send a fax from a UNIX platform.*
- *Use the control panel or NetSpot Device Installer if you configure the protocol settings for the first time. After configuring protocol settings, you can change the content by using a web browser (Remote UI) or a web browser (NetSpot Console).*

Protocol Settings

You can specify the protocol settings for the machine by using any of the following.

This section describes how to specify the settings from the control panel.

- The machine's control panel
- A web browser (Remote UI)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

IMPORTANT

- *If you configure the protocol settings for the first time, use the control panel of this machine or NetSpot Device Installer. After configuring protocol settings, you can change the content by using a web browser (Remote UI) or a web browser (NetSpot Console).*
- *Some items cannot be set using NetSpot Device Installer or NetSpot Console. For details about items that can be set with NetSpot Device Installer or NetSpot Console, see "Network Setting Items," on p. 9-2.*
- *You can retain the security by setting the range of IP addresses of computers that can obtain access to the machine.*
  Once you set the range of IP addresses of computers on which items for the machine can be set or browsed, it is not possible to use a web browser (Remote UI) on computers of which the IP addresses are not allowed; a utility on the computers cannot be used to set or browse detailed information concerning the machine. Also, once you set the range of IP addresses of computers from which data (print/fax/I-fax job) can be sent to the machine, the machine rejects data sent from computers of which the IP addresses are not allowed. For details, see step 21 in "TCP/IP Settings," on p. 3-4. (To print or send a fax/I-fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)
- *When using functions to access external servers on the internet, you may not be able to access them due to the settings of firewalls, etc. In this case, consult your network administrator.*

NOTE

- *For instructions on how to enter settings using a web browser (Remote UI), see Chapter 3, "Customizing Settings," in the Remote UI Guide.*
- *For more information on NetSpot Device Installer or NetSpot Console, see Chapter 7, "Using the Network and Device Settings with Utilities."*

Settings from the Control Panel

The procedures for specifying the settings from the control panel are as follows.

IMPORTANT

- *If you are using the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit for more information on the settings (other than for e-mail/I-fax settings).*
- *Settings specified from the control panel become effective after the machine is restarted, after the procedure.*

NOTE

For instructions on how to enter characters using the touch panel display, see Chapter 2, "Basic Operations," in the Reference Guide.

TCP/IP Settings

NOTE

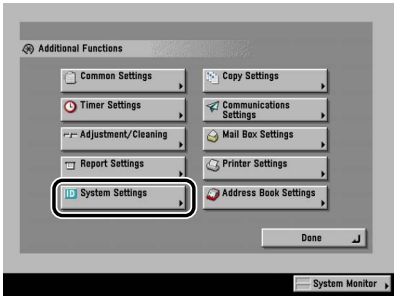
If only the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) or the optional Super G3 FAX Board is installed, set the following items:

- [LPD Settings] (See step 13.)
- [RAW Settings] (See step 14.)
- [IPP Settings] (See step 18.)

---

1 Press .

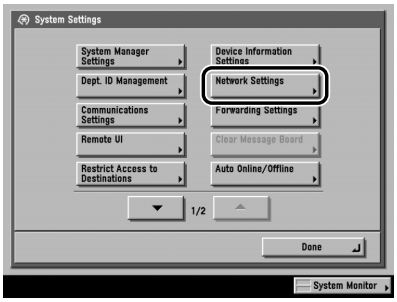
2 Press [System Settings].



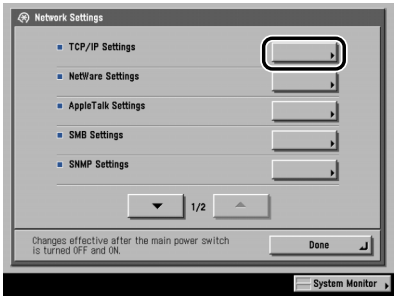
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

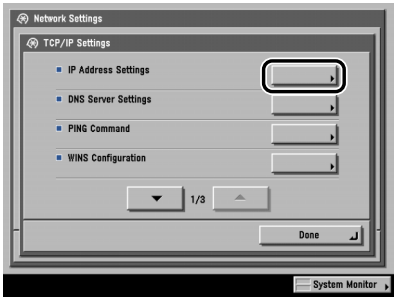
3 Press [Network Settings].



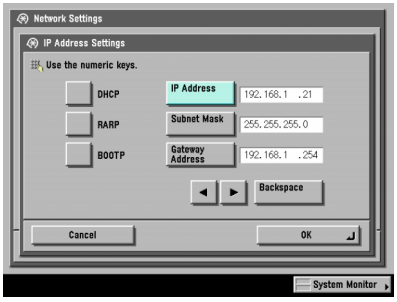
4 Press [TCP/IP Settings].



5 Press [IP Address Settings].



6 Specify the relevant items for your system.



- **Using a fixed IP address:**
  - ❑ Press [IP Address].
  - ❑ Enter the IP address using ⓪ - ⑨ (numeric keys).
  - ❑ Specify the [Subnet Mask] and [Gateway Address] settings in the same way.
- **Using DHCP:**
  - ❑ Press [DHCP].
  - ❑ Enter the IP address, subnet mask, and gateway address.

    If this information cannot be obtained via DHCP after restart of the machine, the settings entered in the initial setup operation (above) are used.

● **Using RARP:**

❑ Press [RARP].

❑ Enter the IP address, subnet mask, and gateway address.

If this information cannot be obtained via RARP after restart of the machine, the settings entered in the initial setup operation (above) are used.

● **Using BOOTP:**

❑ Press [BOOTP].

❑ Enter the IP address, subnet mask, and gateway address.

If this information cannot be obtained via BOOTP after restart of the machine, the settings entered in the initial setup operation (above) are used.

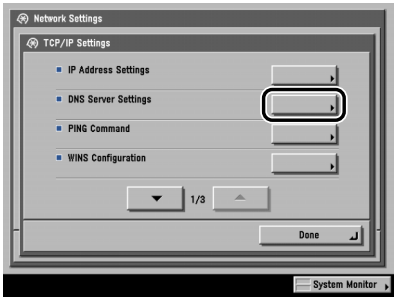
NOTE

- *Only one of the DHCP, BOOTP, or RARP settings can be selected at any one time.*
- *Even if you use the DHCP, BOOTP, and RARP settings, you should enter an IP address, subnet mask, and gateway address. If this information cannot be obtained from the DHCP, BOOTP, or RARP server, the settings entered from the control panel are used.*
- *If the machine is restarted after settings are made to use any of DHCP, BOOTP, or RARP, the TCP/IP Settings screen displays the IP address setting values obtained from the DHCP, BOOTP, or RARP server. (If the IP address, host name, and domain name have been set previously, these will be overwritten by the setting values obtained from DHCP, BOOTP, or RARP.)*
- *If you use DHCP without the DNS dynamic update function, it is recommended that an identical IP address be assigned to the machine at all times. (If the IP address is not identical, the host name for the machine will not be able to correspond to the IP address.)*
- *It takes about two minutes to check whether the DHCP, BOOTP, or RARP settings can be used. If you do not plan to use one of these settings, it is recommended that you turn them off.*

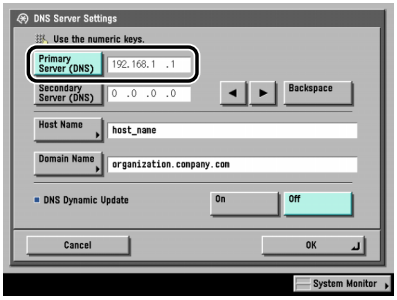
7 Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

8 If you use a DNS server and DNS dynamic update functions, press [DNS Server Settings]. Otherwise, skip to step 13.



9 Specify the IP address of a DNS server.



Use ⓪ - ⑨ (numeric keys) to enter the IP address.

If you do not want to set up a DNS secondary server, enter <0.0.0.0>.

10 Enter the host name and domain name.

Enter the name of the machine as [Host Name], and the network domain name of the machine as [Domain Name].

Example:

[Host Name]: host_name

[Domain Name]: organization.company.com

11 Specify the [DNS Dynamic Update] function.

❑ If you want to use the DNS server dynamic update function, press [On]. Otherwise, press [Off].

IMPORTANT

- *The DNS dynamic update function enables the machine to register the IP address, host name, and domain name of the machine to the DNS server automatically. This function is available in the environment where there is a dynamic DNS server.*
- *To use the DNS dynamic update function, enter the IP address of a DNS server, the host name, and domain name of this machine. (See steps 9 and 10.)*

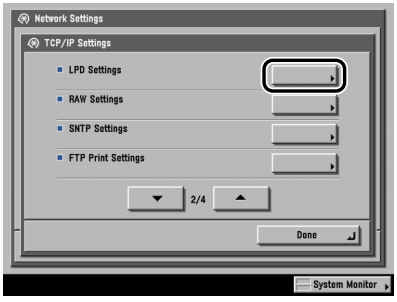
12 Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

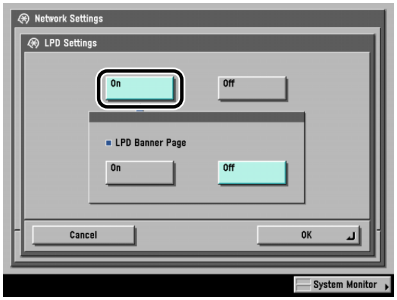
13 Specify the LPD settings.

● **If you want to use LPD as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [LPD Settings] appears → press [LPD Settings].



❑ Press [On].



❑ If you want to print a banner page (the print job must be set to output a banner), press [On]; otherwise, press [Off].

Output of a banner page is set on a print-job basis. Even if [On] is selected for [LPD Banner Page], a banner page cannot be output for a print job, when it is not set to output.

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

● **If you do not want to use LPD as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [LPD Settings] appears → press [LPD Settings].

❑ Press [Off].

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

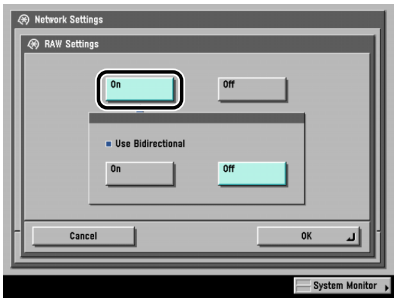
14 Specify the Raw settings.

● **If you want to use Raw as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [RAW Settings] appears → press [RAW Settings].

❑ Select [On].

❑ If you want to establish bidirectional communication using Port9100, press [On] for <Use Bidirectional>.



❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

● **If you do not want to use Raw as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [RAW Settings] appears → press [RAW Settings].

❑ Select [Off].

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

15 Specify the SNTP settings.

IMPORTANT

In order to perform time synchronization through SNTP, it is necessary to set the time zone of the region in which you are using the machine in advance. For instructions on how to set the time zone, see Chapter 6, "System Manager Settings," in the Reference Guide.

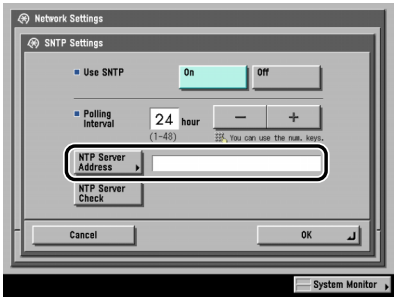
● **If you want to perform time synchronization using SNTP:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [SNTP Settings] appears → press [SNTP Settings].

❑ Press [On] for <Use SNTP>.

Select the interval for performing time synchronization in <Polling Interval>. You can set the interval to be between 1 and 48 hours.

❑ Press [NTP Server Address] → enter the NTP server address or host name.



❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

● **If you do not want to perform time synchronization using SNTP:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [SNTP Settings] appears → press [SNTP Settings].

❑ Press [Off] for <Use SNTP>.

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

16 Specify the FTP print settings.

This machine contains an internal FTP server, and a function that enables the machine to print jobs which are uploaded to this server from PCs on the network. This function is for use in special environments, such as in a large-scale system that includes a printing function for processing a large amount of business data. This function, however, is not a general printing method. For more information on the type of data you can print and the procedure for printing via the internal FTP server, see "Printer Connection Method (FTP)," on p. 3-51.

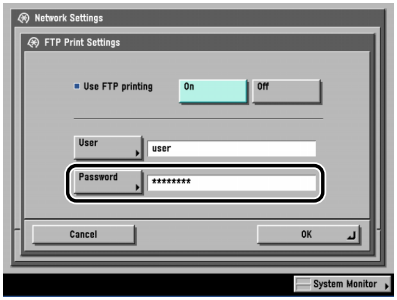
● **If you want to use FTP as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [FTP Print Settings] appears → press [FTP Print Settings].

❑ Press [On] for <Use FTP printing>.

❑ Press [User] to enter the login user name for access to the FTP server.

❑ Press [Password] to enter the login password for access to the FTP server.



❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

IMPORTANT

- *If you do not specify [User] and [Password], all user names and passwords will be valid.*
- *The password will appear in the job list as a user name if you enter "anonymous" as a login user name for access to an FTP server without specifying [User] and [Password], or if you enter "anonymous" in [User]. (To display the job list, press [System Monitor] → [Print] → [Log] on the touch panel display.)*
- *The port number is 21 and cannot be changed.*

● **If you do not want to use FTP as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [FTP Print Settings] appears → press [FTP Print Settings].

❑ Press [Off] for <Use FTP printing>.

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

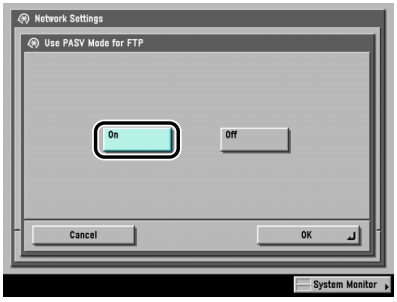
17 Specify the PASV mode for FTP.

IMPORTANT

Whether you use the PASV mode for FTP depends on the network environment you are using and the settings of the file server you are sending to. Before specifying the PASV mode for FTP, consult your network administrator.

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [Use PASV Mode for FTP] appears → press [Use PASV Mode for FTP].

❑ Press [On] for [Use PASV Mode for FTP].



❑ Confirm the settings you specified → press [OK].

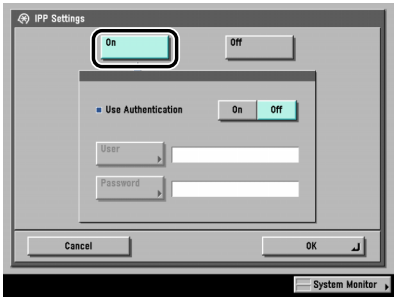
The display returns to the TCP/IP Settings screen.

18 Specify the IPP settings.

● **If you want to use IPP as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [IPP Settings] appears→ press [IPP Settings].

❑ Select [On].



Selecting [On] for [IPP Settings] automatically sets [Use HTTP] to [On].

❑ If you are using IPP authentication, press [On] for <Use Authentication> → enter the user name to use for IPP authentication in [User], and the password to use for IPP authentication in [Password].

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

● **If you do not want to use IPP as the print application:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [IPP Settings] appears → press [IPP Settings].

❑ Select [Off].

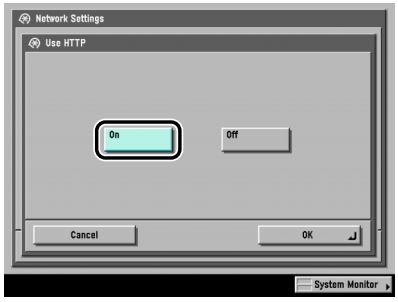
❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

19 Specify the HTTP settings.

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [Use HTTP] appears→ press [Use HTTP].

❑ If you want to use the Remote UI or IPP, select [On].



Selecting [Off] for [Use HTTP] automatically sets [Remote UI] and [IPP Settings] to [Off].

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

IMPORTANT

If you are using the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N), you can print a file in the PDF or PS format by specifying its URL on a web browser (Remote UI). To use this function, you need to make the following settings.

- [Use HTTP]: [On] (Set in this step.)

- [Proxy Settings]: The settings suitable for your environment (See step 20.)

- [LPD Settings]: [On] (See step 13.)

NOTE

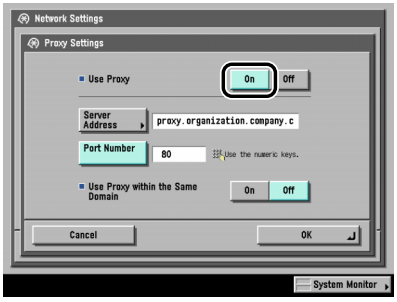
[Remote UI] can be set on the System Settings screen.

20 If you are using the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N), set a proxy. Otherwise, skip to step 21.

● **If you want to use a proxy:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [Proxy Settings] appears → press [Proxy Settings].

❑ Select [On] for <Use Proxy>.



❑ Press [Server Address] to enter a proxy server IP address or name.

❑ Press [Port Number] to enter the port number of a proxy server.

❑ If you want to use a proxy in the same domain, select [On] for <Use Proxy within the Same Domain>.

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

● **If you do not want to use a proxy:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [Proxy Settings] appears → press [Proxy Settings].

❑ Select [Off] for <Use Proxy>.

❑ Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

IMPORTANT

If you are using the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N), you can print a file in the PDF or PS format by specifying its URL on a web browser (Remote UI). To use this function, you need to make the following settings.

- [Use HTTP]: [On] (See step 19.)

- [Proxy Settings]: The settings suitable for your environment (Set in this step.)

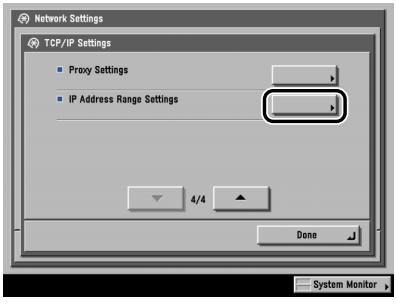
- [LPD Settings]: [On] (See step 13.)

21 Specify the IP address range.

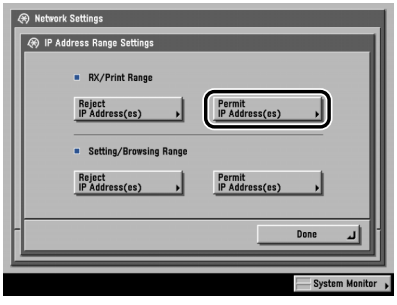
You need to set <RX/Print Range> if any of the following options are installed: Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N), Super G3 FAX Board, or Color Universal Send Kit.

- **If you do not want to restrict the IP addresses of computers from which data (print/fax/I-fax job) can be sent to the machine:**

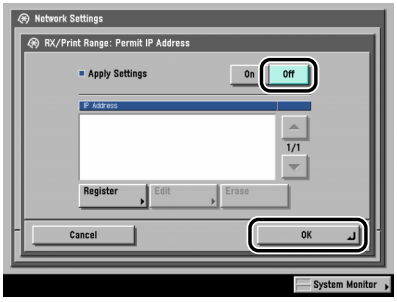
❑ On the TCP/IP Settings screen, press [▼] or [▲] until [IP Address Range Settings] appears → press [IP Address Range Settings].



❑ Press [Permit IP Address(es)] for <RX/Print Range>.

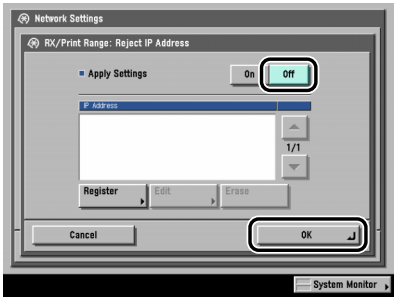


❑ Select [Off] for <Apply Settings> → press [OK].



❑ Press [Reject IP Address(es)] for <RX/Print Range>.

❑ Select [Off] for <Apply Settings> → press [OK].



● **If you want to restrict the IP addresses of computers from which data (print/fax/I-fax job) can be sent to the machine:**

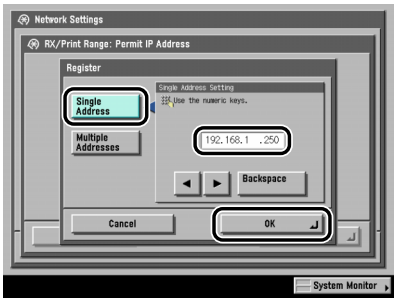
❑ On the TCP/IP Settings screen, press [▼] or [▲] until [IP Address Range Settings] appears → press [IP Address Range Settings].

❑ Press [Permit IP Address(es)] for <RX/Print Range>.

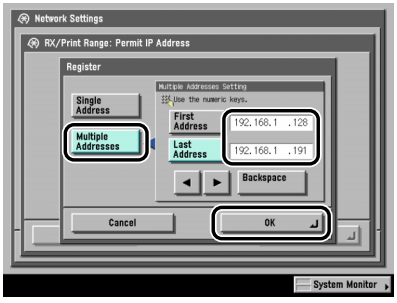
❑ Select [On] for <Apply Settings>.

❑ Press [Register].

❑ If you want to store only one IP address, press [Single Address] to enter the IP address that is to be permitted → press [OK].



❑ If you want to store a range of IP addresses that are to be permitted, press [Multiple Addresses] to specify [First Address] and [Last Address] → press [OK].



❑ Press [OK].

❑ Press [Reject IP Address(es)] for <RX/Print Range>.

❑ Select [On] for <Apply Settings>.

❑ Press [Register].

❑ If you want to store only one IP address, press [Single Address] to enter the IP address that is to be rejected → press [OK].

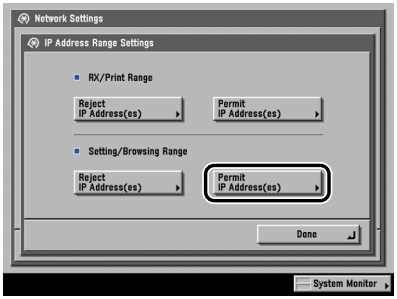
❑ If you want to store a range of IP addresses that are to be rejected, press [Multiple Addresses] to specify [First Address] and [Last Address] → press [OK].

❑ Press [OK].

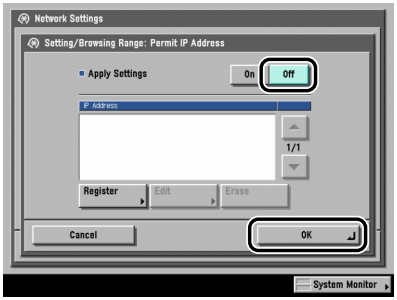
● **If you do not want to restrict the IP addresses of computers on which the machine setting items can be set or browsed using the Remote UI or utility:**

❑ On the TCP/IP Settings screen, press [▼] or [▲] until [IP Address Range Settings] appears → press [IP Address Range Settings].

❑ Press [Permit IP Address(es)] for <Setting/Browsing Range>.

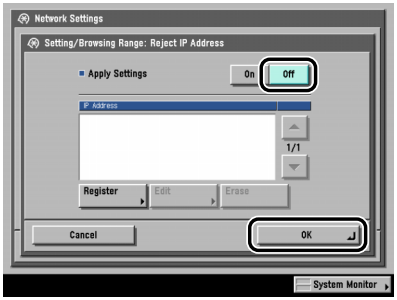


❑ Select [Off] for <Apply Settings> → press [OK].

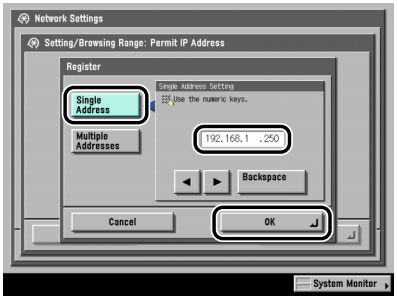


❑ Press [Reject IP Address(es)] for <Setting/Browsing Range>.

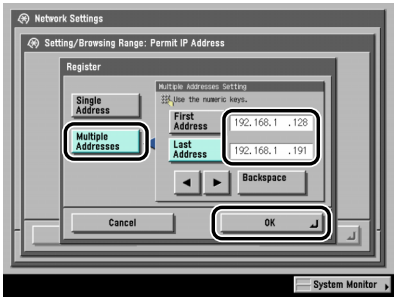
❑ Select [Off] for [Apply Settings]→ press [OK].



- **If you want to restrict the IP addresses of computers on which the machine setting items can be set or browsed using the Remote UI or utility:**
  - ❑ On the TCP/IP Settings screen, press [▼] or [▲] until [IP Address Range Settings] appears → press [IP Address Range Settings].
  - ❑ Press [Permit IP Address(es)] for <Setting/Browsing Range>.
  - ❑ Select [On] for <Apply Settings>.
  - ❑ Press [Register].
  - ❑ If you want to store only one IP address, press [Single Address] to enter the IP address that is to be permitted → press [OK].



  - ❑ If you want to store a range of IP addresses that are to be permitted, press [Multiple Addresses] to specify [First Address] and [Last Address] → press [OK].



  - ❑ Press [OK].
  - ❑ Press [Reject IP Address(es)] for <Setting/Browsing Range>.
  - ❑ Select [On] for <Apply Settings>.
  - ❑ Press [Register].

❑ If you want to store only one IP address, press [Single Address] to enter the IP address that is to be rejected → press [OK].

❑ If you want to store a range of IP addresses that are to be rejected, press [Multiple Addresses] to specify [First Address] and [Last Address] → press [OK].

❑ Press [OK].

IMPORTANT

- *You can register up to eight IP addresses or IP address ranges.*
- *An IP address of <0.0.0.0> cannot be specified.*
- *The value of [First Address] for [Multiple Addresses] should be smaller than or equal to that of [Last Address].*
- *If <Apply Settings> is set to 'Off' for both [Permit IP Address(es)] and [Reject IP Address(es)], all IP addresses are permitted.*
- *If <Apply Settings> is set to 'Off' for [Permit IP Address(es)] and <Apply Settings> is set to 'On' for [Reject IP Address(es)], IP addresses that are beyond the specified range of [Reject IP Address(es)] are permitted.*
- *If <Apply Settings> is set to 'On' for [Permit IP Address(es)] and <Apply Settings> is set to 'Off' for [Reject IP Address(es)], IP addresses that are beyond the specified range of [Permit IP Address(es)] are not permitted.*
- *If <Apply Settings> for both [Permit IP Address(es)] and [Reject IP Address(es)] is set to 'On', IP addresses that are beyond the ranges of both [Permit IP Address(es)] and [Reject IP Address(es)] are not permitted.*
- *If <Apply Settings> for both [Permit IP Address(es)] and [Reject IP Address(es)] is set to 'On', IP addresses that are within the ranges of both [Permit IP Address(es)] and [Reject IP Address(es)] are not permitted.*
- *If the usage of a protocol or print application is not permitted on your device, it cannot be used even after its IP address is permitted on the machine; on your device, configure the settings to permit the protocol or print application.*

NOTE

This machine logs attempts to gain access from IP addresses that it has been set to reject. For instructions on how to refer to the access log, see "Viewing the Network Access Log," on p. 9-13.

22 Press [Done].

The display returns to the TCP/IP Settings screen.

23 Press [Done] repeatedly until the Additional Functions screen closes.

24 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

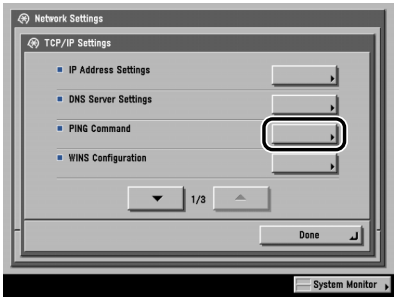
NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

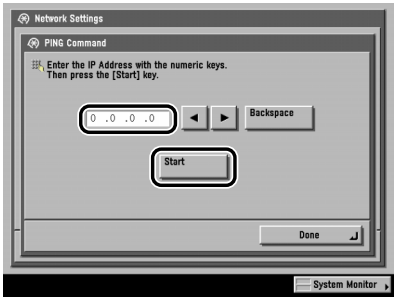
25 Check to see if the network settings you specified are set correctly.

❑ Press ⓐ → [System Settings] → [Network Settings] → [TCP/IP Settings].

❑ Press [PING Command].



❑ Enter an IP address that exists on the network → press [Start].



Use ⓪ - ⑨ (numeric keys) to enter an IP address.

When you press [Start], the result of the PING command appears on the touch panel display.

If this result is inappropriate, check the settings described in "Interface Settings," on p. 2-9, and "TCP/IP Settings," on p. 3-4.

IMPORTANT

- *If you set the startup time of the network function of the machine by following the procedure in "Startup Time Settings," on p. 3-30, execute the PING command only after the time you set as the startup time passes (the default setting startup time is '60 seconds').*
- *If you connect the machine to a switching hub, the machine may not be able to connect to a network even though your network settings are appropriate. This problem may be resolved by delaying the startup of network communications for the machine. See "Startup Time Settings," on p. 3-30 for how to set up the startup time.*

❑ Press [Done] → press [▼] or [▲] until [SNTP Settings] appears → press [SNTP Settings].

❑ Press [NTP Server Check].

<OK> is displayed if time synchronization is working correctly via SNTP.

NOTE

- *If <Error> is displayed, check the settings for [NTP Server Address] set in step 15.*
- *Even if you perform [NTP Server Check], time settings are not updated. Check that communications are possible between the machine and the NTP server.*

26 Press [Done] repeatedly until the Additional Functions screen closes.

The TCP/IP settings are complete.

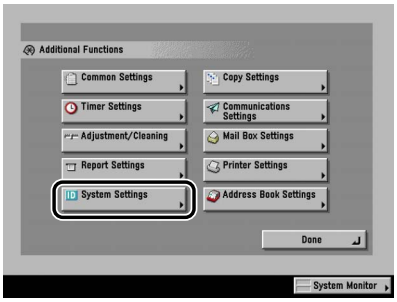
E-Mail/I-Fax Settings

IMPORTANT

To use the e-mail/I-fax functions, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

1 Press ⓐ.

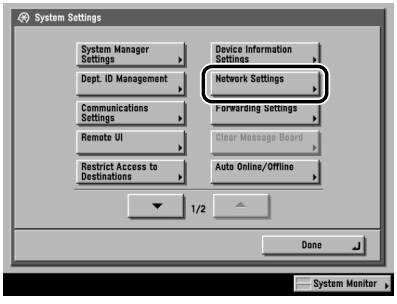
2 Press [System Settings].



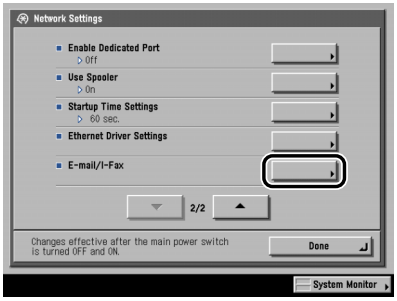
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

3 Press [Network Settings].



4 Press [▼] or [▲] until [E-mail/I-Fax] appears → press [E-mail/I-Fax].



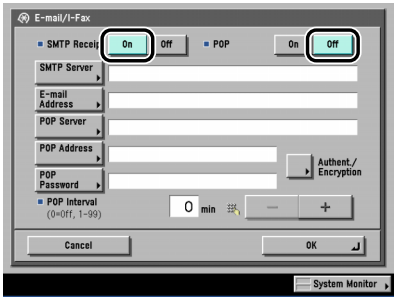
5 Specify the mail server for receiving e-mail/I-faxes.

The machine supports both SMTP and POP3 functions.

NOTE

The machine can receive I-fax images and communication error notices only.

- **If you want to receive e-mail/I-faxes using the machine's own SMTP receiving function:**
  - ❑ Register the host name of the machine with the DNS server.
  - ❑ Press [On] for <SMTP Receipt> → press [Off] for <POP>.



  - ❑ Press [E-mail Address] → enter the e-mail address your machine will use.

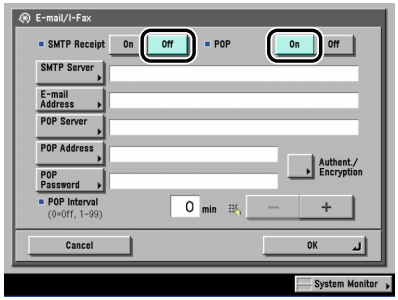
    You can specify any user name (the part of the address located in front of the @ symbol). Enter the host name after the "@" symbol in the e-mail address.

    Input Example : ifax@host_name.organization.company.com

    (In this example the host name of the machine registered with the DNS server is "host_name.organization.company.com".)

● **If you want to receive e-mail/I-faxes using the POP server:**

❑ Press [On] for <POP> → press [Off] for <SMTP Receipt>.



❑ Press [E-mail Address] → enter the e-mail address your machine will use.

Input Example : account1@pop_server.organization.company.com
(In this example the name of the POP server is "pop_server.organization.company.com".)

❑ Press [POP Server] → enter a POP server IP address or name.

Input Example : IP address: 192.168.1.1
Name: pop_server.organization.company.com

❑ Press [POP Address] → enter the login name for access to the POP server.

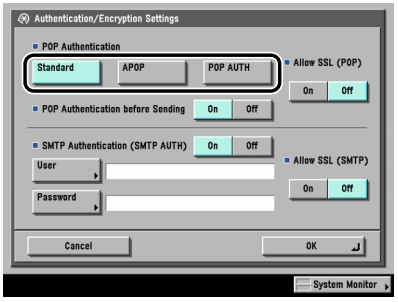
Input Example : account1

❑ Press [POP Password] → enter the password for access to the POP server.

❑ Press [-] and [+] or use ⓪ - ⑨ (numeric keys) to set [POP Interval] at the interval you want the POP server to check for incoming e-mail.

If the interval is set to 0, the POP server is not checked automatically. For instructions on how to manually check the POP server, see Chapter 8, "Checking/Changing the Send/Receive Status," in the *Sending and Facsimile Guide*.

❑ Press [Authent./Encryption].



Select the authentication method supported by the POP server from [Standard], [APOP], or [POP AUTH].

❑ If you want to send encrypted data, press [On] for <Allow SSL (POP)>.

IMPORTANT

If the POP server does not support SSL encryption, data is not encrypted when [On] is selected for <Allow SSL (POP)>.

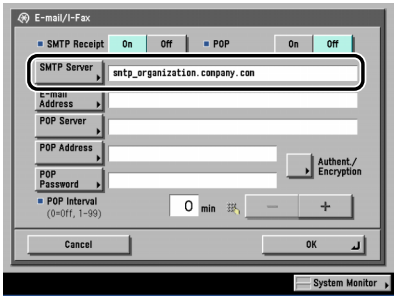
❑ Press [OK].

The display returns to the E-mail/I-Fax screen.

6 Specify the mail server for sending e-mail/I-faxes.

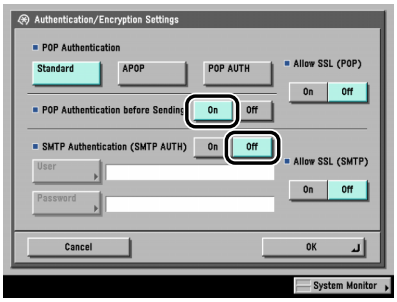
● **If you are using an SMTP server that requires POP before SMTP (method for authenticating users who have logged in the POP server before sending e-mail):**

❑ Press [SMTP Server] → enter an SMTP server IP address or name.



Input Example : IP address: 192.168.1.1
Name: smtp.organization.company.com

❑ Press [Authent./Encryption] → press [On] for <POP Authentication before Sending> → press [Off] for <SMTP Authentication (SMTP AUTH)>.



❑ Press [OK].

The display returns to the E-mail/I-Fax screen.

● **If you are using an SMTP server that requires SMTP Authentication (method for authenticating users who have logged in the SMTP server before sending e-mail):**

❑ Press [SMTP Server] → enter an SMTP server IP address or name.

Input Example : IP address: 192.168.1.1
Name: smtp.organization.company.com

❑ Press [Authent./Encryption] → press [On] for <SMTP Authentication (SMTP AUTH)> → press [Off] for <POP Authentication before Sending>.

❑ Press [User] → enter the user name used for logging in to the SMTP server.

If you are using the Microsoft SMTP server, enter a user name in [User] using the following format: user name @domain name.

Input Example : user@organization.company.com

❑ Press [Password] → enter the password used for logging in to the SMTP server.

❑ If you want to send encrypted data, press [On] for <Allow SSL (SMTP)>.

IMPORTANT

If the SMTP server does not support the encryption, data is not encrypted when [On] is selected for <Allow SSL (SMTP)>.

❑ Press [OK].

The display returns to the E-mail/I-Fax screen.

- **If you are using an SMTP server that does not require authentication for sending e-mail:**
  - ❑ Press [SMTP Server] → enter an SMTP server IP address or name.

    Input Example : IP address: 192.168.1.1
    Name: smtp.organization.company.com
  - ❑ Press [Authent./Encryption] → press [Off] both for <SMTP Authentication (SMTP AUTH)> and <POP Authentication before Sending>.
  - ❑ Press [OK].

    The display returns to the E-mail/I-Fax screen.

7 **Confirm the settings you entered → press [OK].**

8 **Press [Done] repeatedly until the Additional Functions screen closes.**

9 **Restart the machine.**

- ❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The e-mail/I-fax settings are complete.

Startup Time Settings

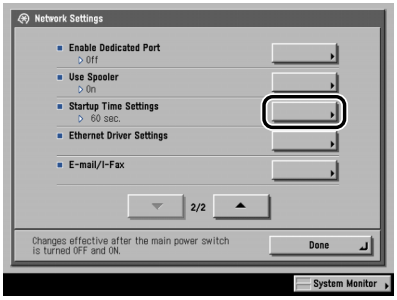
If you connect the machine to a switching hub, it may not be able to connect to a network even though your network settings are set correctly.

This occurs because the spanning tree process performed between switching hubs prevents them from communicating with each other immediately after the machine connects to a switching hub.

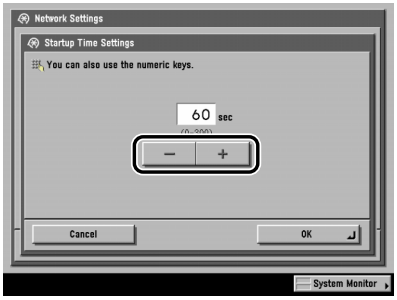
In this case, use the following procedure to delay the start of communication.

1 **Press ⊛ → [System Settings] → [Network Settings].**

2 **Press [▼] or [▲] until [Startup Time Settings] appears → press [Startup Time Settings].**



3 **Set the time period required to delay the startup of network communications for the machine.**



Press [-] or [+] to set the time period.

4 **Confirm the settings you specified → press [OK].**

The display returns to the Network Settings screen.

5 **Press [Done] repeatedly until the Additional Functions screen closes.**

6 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The startup time settings are complete.

Setting Up a Computer for Printing/Sending a Fax (Windows/UNIX)

After you have completed the protocol settings for printing and sending a fax with the machine, you are ready to set up each of the computers for printing or sending a fax.

■ Connecting to a TCP/IP Network

All computers that use the printer must have TCP/IP client software installed and must be enabled for TCP/IP network use. For details, see the manuals provided with the operating system.

■ Installing the Driver and Specifying the Port Setting

To print or send a fax from a computer, you must install a driver and specify a port setting. The port setting differs depending on the print application used for printing or sending a fax. Use the following information as a guide to determine the print application you are using, and then perform the necessary operations.

- LPD
  This is the print application generally used with TCP/IP.
  See "Printer Connection Method (LPD/Raw)," on p. 3-35.
- Raw
  This is a print application used with Windows. It can send a job to the machine at higher speeds than LPD.
  See "Printer Connection Method (LPD/Raw)," on p. 3-35.
- IPP
  This is a print application that can be used with Windows. It uses the HTTP protocol to send a job to the machine using Internet/intranet connections.
  See "Printer Connection Method (IPP)," on p. 3-46.
- FTP
  This is a print application that prints files by copying them to the printer using FTP client software.
  See "Printer Connection Method (FTP)," on p. 3-51.
- SMB
  This is a print application that can be used with NetBIOS network.
  See Chapter 5, "Using a NetBIOS Network."

IMPORTANT

- *To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *If the settings for <RX/Print Range> in [IP Address Range Settings] do not permit the IP address of a computer in which a driver is installed, you cannot print from the computer. (See step 21 in "TCP/IP Settings," on p. 3-4.)*
- *If you print with IPP, the [Pause Printing] and [Cancel All Documents] settings on the [Printer] menu in the Windows print queue cannot be used. (To view the print queue, click the [Start] menu → point to [Settings] → click [Printers] → double-click the icon of the machine.)*

NOTE

- *It is recommended that you install Canon LPR2 when using Raw or IPP in Windows. Canon LPR2 enables you to easily set ports. For more information, see the Canon LPR2 User's Guide (PDF manual). For instructions on how to display the Canon LPR2 User's Guide, see the Network Quick Start Guide.*
- *If Windows NT/2000/XP/Server 2003 is on your network, the following procedure enables you to set up a print server for more efficient management of network printers. Once a print server is set up, print jobs can be managed by the print server. Also, by setting up an alternate driver for the print server, printer drivers can be installed in each computer via the network.*
  For instructions on how to set print servers, see the following procedures indicated in the manual for each driver:
  - *If you want to use the PCL printer driver*
    See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the PCL Driver Guide.
  - *If you want to use the PS printer driver*
    See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the PS Driver Guide.
  - *If you want to use the UFR printer driver*
    See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the UFR Driver Guide.
  - *If you want to use the fax driver*
    See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the Fax Driver Guide.

Printer Connection Method (LPD/Raw)

The following is the procedure for specifying the port setting.

Windows 98/Me

■ *Installing a New Driver*

1 Install the driver.

Install the driver according to the following procedures indicated in the manual for each driver:

- If you want to use the PCL printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *PCL Driver Guide*.
- If you want to use the PS printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *PS Driver Guide*.
- If you want to use the UFR printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *UFR Driver Guide*.
- If you want to use the fax driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *Fax Driver Guide*.

IMPORTANT

If your computer fails to transmit data to the printer during installation of the driver, when the error message appears, click [No] → set the byte count mode to off.

NOTE

- *The print application will be LPD and the print queue will be set to <LP> if the driver has been installed according to the above procedures.*
- *This machine enables you to specify print queues other than <LP>. For details on print queues and instructions on how to change the settings, see "Changing the Port after Installing the Driver," on p. 3-36.*

■ *Changing the Port after Installing the Driver*

1 **Install Canon LPR2, and change the port settings.**

For instructions on how to install Canon LPR2 and set ports, see the *Canon LPR2 User's Guide* (PDF manual). For instructions on how to display the *Canon LPR2 User's Guide*, see the *Network Quick Start Guide*.

IMPORTANT

If you want to use LPD, enter one of the following in [LPR Queue Name] in the [Add Port] dialog box of Canon LPR2.

- *LP*
  The machine prints according to its spool settings. Normally enter <LP> as a print queue.
- *SPOOL*
  The machine prints only after spooling a print job on the hard disk, regardless of its spool settings.
- *DIRECT*
  The machine prints without spooling a print job on the hard disk, regardless of its spool settings.

The installation of the driver and the port settings is complete.

Windows 2000/XP/Server 2003

■ *Installing a New Driver*

1 **Install the driver.**

Install the driver according to the following procedures indicated in the manual for each driver:

- If you want to use the PCL printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *PCL Driver Guide*.
- If you want to use the PS printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *PS Driver Guide*.
- If you want to use the UFR printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *UFR Driver Guide*.
- If you want to use the fax driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *Fax Driver Guide*.

NOTE

- *The print application will be LPD and the print queue will be set to <LP> if the driver has been installed according to the above procedures.*
- *This machine enables you to specify print queues other than <LP>. You can also use Raw as the print application. For instructions on how to change the settings, see "Changing the Port after Installing the Driver," on p. 3-37.*

■ *Changing the Port after Installing the Driver*

1 Install Canon LPR2, and change the port settings.

If you do not want to use Canon LPR2, proceed to step 2.

For instructions on how to install Canon LPR2 and set ports, see the *Canon LPR2 User's Guide* (PDF manual). For instructions on how to display the *Canon LPR2 User's Guide*, see the *Network Quick Start Guide*.

If you want to use Canon LPR2, the port changes are complete.

IMPORTANT

If you want to use LPD, enter one of the following in [LPR Queue Name] in the [Add Port] dialog box of Canon LPR2.

- *LP*
  The machine prints according to its spool settings. Normally enter <LP> as a print queue.
- *SPOOL*
  The machine prints only after spooling a print job on the hard disk, regardless of its spool settings.
- *DIRECT*
  The machine prints without spooling a print job on the hard disk, regardless of its spool settings.

NOTE

If you are using Windows 2000/XP/Server 2003, you can set LPD or Raw by using the standard feature of your OS, without installing Canon LPR2. If you do not want to use Canon LPR2, see steps 2 to 11.

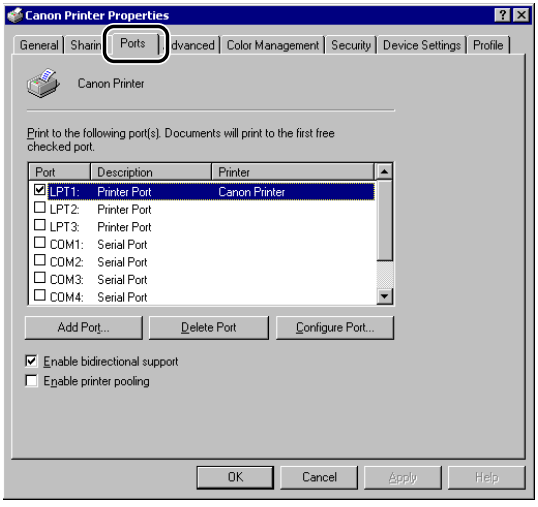
2 Open the printer properties dialog box.

- ❑ If you are using Windows 2000, on the [Start] menu, point to [Settings] → click [Printers].
- ❑ If you are using Windows XP Professional/Server 2003, on the [Start] menu, click [Printers and Faxes].
- ❑ If you are using Windows XP Home Edition, on the [Start] menu, point to [Control Panel] → point to [Printers and Other Hardware] → click [Printers and Faxes].

3 **Right-click the icon of the printer you installed → click [Properties].**

4 **Click the [Ports] tab to display the [Ports] sheet.**

For Windows 2000



5 **Click [Add Port] to open the [Printer Ports] dialog box.**

6 **From [Available ports types], select [Standard TCP/IP Port] → click [New Port].**

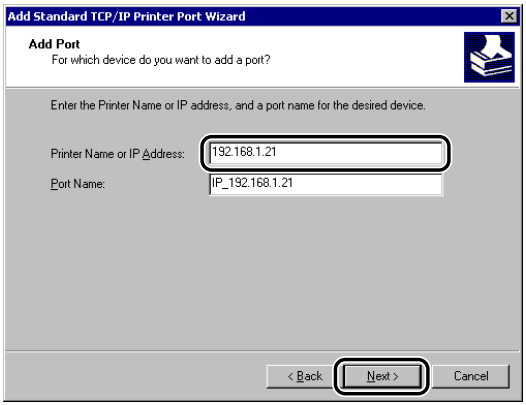
The Add Standard TCP/IP Printer Port Wizard starts.

7 **Click [Next].**

8 Enter the printer IP address or printer host name.

❑ In [Printer Name or IP Address], enter the printer IP address or printer host name → click [Next].

For Windows 2000


Add Standard TCP/IP Printer Port Wizard
Add Port
For which device do you want to add a port?
Enter the Printer Name or IP address, and a port name for the desired device.
Printer Name or IP Address:
192.168.1.21
Port Name:
IP_192.168.1.21
< Back
Next >
Cancel

❑ After the computer has confirmed that there is a printer in which the entered IP address is assigned, the [Completing the Add Standard TCP/IP Printer Port Wizard] window appears → click [Finish].

If the dialog box displays <Additional Port Information Required>, follow the instructions on the screen to search again, or click [Standard] → click [Canon Network Printing Device with P9100] under [Device type] → click [Next] to exit the Wizard.

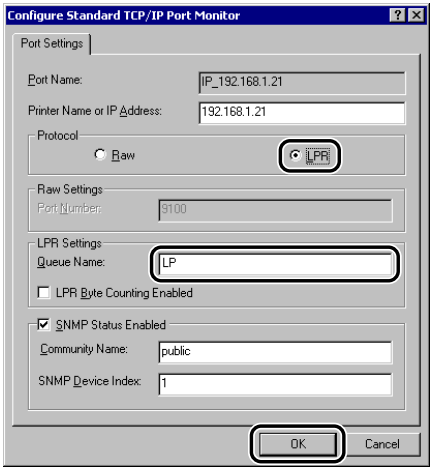
9 Click [Close] to close the [Printer Ports] dialog box.

10 If you want to use LPD, change the port configuration information. If you want to use Raw, proceed to step 11.

❑ In the printer properties dialog box, click [Configure Port].

❑ Select [LPR] under [Protocol] → enter a print queue in [Queue Name] under [LPR Settings] → click [OK].

For Windows 2000



You can specify a print queue in [Queue Name]. The following three print queues are available:

- LP
  The machine prints according to its spool settings. Normally enter <LP> as a print queue.
- SPOOL
  The machine prints only after spooling a print job on the hard disk regardless of its spool settings.
- DIRECT
  The machine prints without spooling a print job on the hard disk regardless of its spool settings.

11 Click [OK].

The installation of the driver and the port settings is complete.

■ Installing a New Driver

1 Check that [Microsoft TCP/IP Printing] is installed.

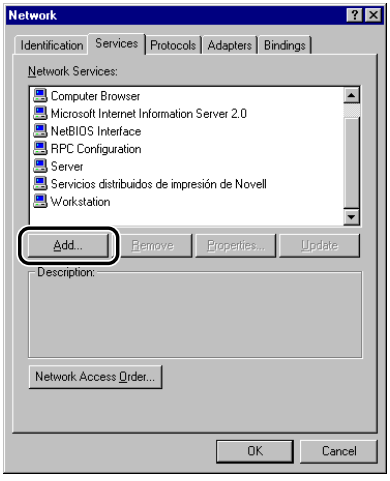
❑ Right-click the [Network Neighborhood] icon on the screen → click [Properties].

❑ Click the [Services] tab to display the [Services] sheet.

If [Microsoft TCP/IP Printing] is not included in [Network Services], proceed to step 2; otherwise skip to step 3.

2 If [Microsoft TCP/IP Printing] is not installed, install it.

❑ Click [Add].



❑ Select [Microsoft TCP/IP Printing] from [Network Services] → click [OK].

❑ When asked to insert the Windows NT setup disk, insert the disk.

❑ After the files have been copied, the [Network] dialog box opens → click [OK].

❑ Click [Restart] to restart Windows NT.

3 Install the driver.

Install the driver according to the following procedures indicated in the manual for each driver:

- If you want to use the PCL printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *PCL Driver Guide*.
- If you want to use the PS printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *PS Driver Guide*.
- If you want to use the UFR printer driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *UFR Driver Guide*.
- If you want to use the fax driver
  See the procedure for dynamic installation in Chapter 2, "Getting Started," in the *Fax Driver Guide*.

NOTE

- *The print application will be LPD and the print queue will be set to <LP> if the driver has been installed according to the above procedures.*
- *This machine enables you to specify print queues other than <LP>. For details on print queues and instructions on how to change the settings, see "Changing the Port after Installing the Driver," on p. 3-42.*

■ *Changing the Port after Installing the Driver*

1 Install Canon LPR2, and change the port settings.

If you do not want to use Canon LPR2, proceed to step 2.
For instructions on how to install Canon LPR2 and set ports, see the *Canon LPR2 User's Guide* (PDF manual). For instructions on how to display *the Canon LPR2 User's Guide*, see the *Network Quick Start Guide*.

If you want to use Canon LPR2, the port changes are complete.

IMPORTANT

If you want to use LPD, enter one of the following in [LPR Queue Name] in the [Add Port] dialog box of Canon LPR2.

- *LP*
  The machine prints according to its spool settings. Normally enter <LP> as a print queue.
- *SPOOL*
  The machine prints only after spooling a print job on the hard disk, regardless of its spool settings.

- *DIRECT*
  The machine prints without spooling a print job on the hard disk, regardless of its spool settings.

NOTE

If you are using Windows NT 4.0, you can set LPD by using the standard service of your OS (Microsoft TCP/IP), without installing Canon LPR2. In this case, you cannot set Raw. For instructions on how to install the Microsoft TCP/IP Printing service, see steps 1 and 2 of "Installing a New Driver," on p. 3-41. For instructions on how to change ports using the Microsoft TCP/IP Printing service, see steps 2 to 9.

2 **On the [Start] menu, point to [Settings] → click [Printers].**

3 **Right-click the icon of the printer you installed → click [Properties].**

4 **Click the [Ports] tab to display the [Ports] sheet.**

5 **Click [Add Port] to open the [Printer Port] dialog box.**

6 **From [Available Printer Ports], select [LPR Port] → click [New Port].**

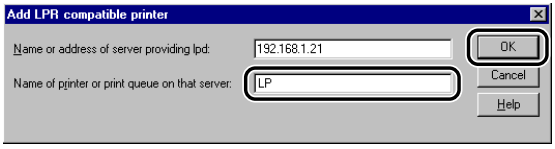
The [Add LPR compatible printer] dialog box opens.

IMPORTANT

If [LPR Port] is not displayed, you need to install the Microsoft TCP/IP Printing service. Click [Cancel] to close all dialog boxes → install the Microsoft TCP/IP Printing service. After installing, start again from step 2.
For instructions on how to install the Microsoft TCP/IP Printing service, see steps 1 and 2 in "Installing a New Driver," on p. 3-41.

7 **Enter the IP address or printer host name in [Name or address of server providing lpd].**

8 Enter the print queue name in [Name of printer or print queue on that server] → click [OK].



You can specify a print queue in [Name of printer or print queue on that server]. The following three print queues are available:

- LP
  The machine prints according to its spool settings. Normally enter <LP> as a print queue.
- SPOOL
  The machine prints only after spooling a print job on the hard disk regardless of its spool settings.
- DIRECT
  The machine prints without spooling a print job on the hard disk regardless of its spool settings.

9 Click [OK].

The installation of the driver and the port settings is complete.

UNIX

NOTE

The machine supports the LPD print application for printing over TCP/IP networks.

1 Log in to a workstation as a superuser.

2 Set up the spooling system.

- **Example using Solaris 1.x:**
  - ❑ Add the following to the /etc/printcap file:

    <Print queue name>|<comment>:\

    :lp=<device special file>:\

    :sd=<spool directory>:\

    :rm=<printer IP address or host name>:

    Input Example:

    print_queue_name|comments:\

    :lp=/var/spool/print_queue_name/.null:\

    :sd=/var/spool/print_queue_name:\

    :rm=printer_host_name:

- **Example using Solaris 2.x:**
  - ❑ Start the admintool utility.
  - ❑ Select [Browse] → [Printers].
  - ❑ Select [Edit] → [Add] → [Access to Printer].
  - ❑ In [Printer Server], enter the IP address or printer host name.
  - ❑ Click [OK].

NOTE

- *The admintool utility belongs to the operating system. For specific operating instructions, see the operating system manual.*
- *The above procedures are only examples. The setup procedures for your environment may differ.*
- *You can specify a print queue. The following three print queues are available:*
  - *LP*
    The machine prints according to its spool settings. Normally enter <LP> as a print queue.
  - *SPOOL*
    The machine prints only after spooling a print job on the hard disk regardless of its spool settings.
  - *DIRECT*
    The machine prints without spooling a print job on the hard disk regardless of its spool settings.
- *When the job record appears on the touch panel display of this machine, <unknown> may be displayed as Document Name and User Name of printing data transmitted to this machine over UNIX network.*
  (To display the job record, press [System Monitor] → [Print] → [Log] on the touch panel display in this order.)

The print settings are complete.

Printer Connection Method (IPP)

The following is the procedure for specifying the port setting.

Windows 98/Me/NT 4.0

NOTE

- *If you are using Windows 95/98/Me, you can also set IPP by installing the IPP Client software for Windows 95/98/Me supplied by Microsoft.*
- *In the following procedures, items displayed on the screen for Windows 98 are used; items might differ depending on your operating system.*

1 Check the settings for <RX/Print Range> in [IP Address Range Settings] to see whether the IP address of the computer in which a driver is to be installed is permitted. (See step 21 in "TCP/IP Settings," on p. 3-4.)

IMPORTANT

- *If the settings for <RX/Print Range> in [IP Address Range Settings] do not permit the IP address, you cannot install a driver.*
- *If the IP address of the computer is beyond the range of the permitted addresses for <RX/Print Range> after installing a driver, you cannot print from the computer.*

2 After installing Canon LPR2, restart the computer.

For instructions on how to install Canon LPR2 and set ports, see the *Canon LPR2 User's Guide* (PDF manual). For instructions on how to display the *Canon LPR2 User's Guide*, see the *Network Quick Start Guide*.

3 Install the driver.

Install the driver according to the following procedures indicated in the manual for each driver:

- If you want to use the PCL printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *PCL Driver Guide*.
- If you want to use the PS printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *PS Driver Guide*.
- If you want to use the UFR printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *UFR Driver Guide*.
- If you want to use the fax driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *Fax Driver Guide*.

When the dialog box for selecting the port appears during installation, click [Use Standard Port].

4 When you have finished installing the drivers, use Canon LPR2 to set the ports.

For instructions on how to install Canon LPR2 and set ports, see the *Canon LPR2 User's Guide* (PDF manual). For instructions on how to display the *Canon LPR2 User's Guide*, see the *Network Quick Start Guide*.

IMPORTANT

When manually entering a URL in [Printer URL] in the [Add Port] dialog box of Canon LPR2, use the following format:
http://< the IP address or host name of the machine>/ipp

The installation of the driver and the port settings is complete.

Windows 2000/XP/Server 2003

NOTE

By installing Canon LPR2, you can also set IPP. Canon LPR2 enables you to easily set ports. For more information, see the Canon LPR2 User's Guide (PDF manual). For instructions on how to display the Canon LPR2 User's Guide, see the Network Quick Start Guide.

1 Check the settings for <RX/Print Range> in [IP Address Range Settings] to see whether the IP address of the computer in which a driver is to be installed is permitted. (See step 21 in "TCP/IP Settings," on p. 3-4.)

IMPORTANT

- *If the settings for <RX/Print Range> in [IP Address Range Settings] do not permit the IP address, you cannot install a driver.*
- *If the IP address of the computer is beyond the range of the permitted addresses for <RX/Print Range> after installing a driver, you cannot print from the computer.*

2 Start the Add Printer Wizard.

- **If you are using Windows 2000:**
  - ❑ On the [Start] menu, point to [Settings] → click [Printers].
  - ❑ Double-click the [Add Printer] icon.
- **If you are using Windows XP Professional:**
  - ❑ On the [Start] menu, click [Printers and Faxes].
  - ❑ In the [Printer Tasks] menu, select [Add a printer].
- **If you are using Windows XP Home Edition:**
  - ❑ On the [Start] menu, click [Control Panel].
  - ❑ Click [Printers and Other Hardware] → click [Printers and Faxes].
  - ❑ In the [Printer Tasks] menu, select [Add a printer].
- **If you are using Windows Server 2003:**
  - ❑ On the [Start] menu, click [Printers and Faxes].
  - ❑ Double-click the [Add a printer] icon.

3 Enter the URL of your printer.

❑ Click [Next].

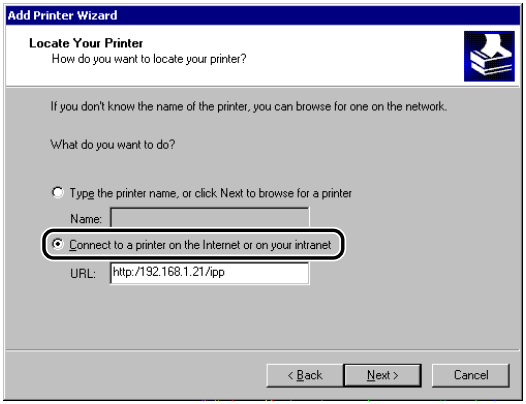
A dialog box for selecting the printer connection method appears.

❑ If you are using Windows 2000, select [Network Printer].
If you are using Windows XP/Server 2003, select [A network printer, or a printer attached to another computer].

❑ Click [Next].

A dialog box for locating your printer appears.

❑ If you are using Windows 2000, select [Connect to a printer on the Internet or on your intranet].
If you are using Windows XP/Server 2003, select [Connect to a printer on the Internet or on a home or office network].


Add Printer Wizard
Locate Your Printer
How do you want to locate your printer?
If you don't know the name of the printer, you can browse for one on the network.
What do you want to do?
Type the printer name, or click Next to browse for a printer
Name:
Connect to a printer on the Internet or on your intranet
URL:
http://192.168.1.21/ipp
< Back
Next >
Cancel

❑ Enter the following URL in [URL].
http://<the IP address or host name of the machine>/ipp

❑ Click [Next].

A dialog box for selecting the printer manufacturer and printer name appears.

❑ Click [Have Disk] → specify the folder on the CD-ROM that contains the printer driver.

4 Follow the instructions on the screen to complete the installation.

The installation of the driver and the port settings is complete.

Printer Connection Method (FTP)

This machine contains an internal FTP server, and a function that enables the machine to print jobs which are uploaded to this server from PCs on the network. This function is for use in special environments, such as in a large-scale system that includes a printing function for processing a large amount of business data. This function, however, is not a general printing method. The only types of data you can print using this method are plain text data, and binary data after it has passed through the printer driver. Since jobs uploaded to the FTP server are printed without passing through a printer driver, if you upload application data, it does not pass through a printer driver, and therefore will never be printed correctly.
The following is the procedure for printing via FTP.

1 Go to the MS-DOS prompt or the Command prompt → log in to the machine's FTP server.

For details on user names and passwords, see step 16 in "TCP/IP Settings," on p. 3-4.

IMPORTANT

Up to three clients can be logged in simultaneously to its FTP server.

2 Execute the following command to change the file type to IMAGE (BINARY).

ftp> bin

IMPORTANT

Change the file type to IMAGE (BINARY) even if you are printing text files.

3 Execute the following command to upload the file to be printed.

ftp> put <file name to be printed>

4 Execute the following command to log out from the server.

ftp> bye

NOTE

- *The following is a UNIX command example for steps 1 to 4.*

```
U:> ftp 172.24.176.244        *Connect to server
Connected to 172.24.176.244.
220 Connection established.
Name (172.24.176.244:none): user_name      *User login
331 Password required to login.
Password:              *Enter password
230 User user_name logged in.
ftp> bin               *Set file type
200 Type set to IMAGE (binary).
ftp> put print.txt     *Upload print file
200 PORT command successful.
150 Opened BINARY data connection for file transfer.
226 Transfer complete.
ftp> bye               *Cut off server connection
221 Server closing down connection.
```

- *You cannot perform manipulation of files (changing file names, deleting, etc.) on the FTP server by using FTP commands.*

Setting Up a Computer as a File Server

To send data from the machine to a computer on your network, you need to specify the settings of the computer for receiving data.

You can send data over a TCP/IP network to any of the following:

- FTP server (Windows NT/2000/XP/Server 2003, UNIX, Linux, Mac OS X, iW Gateway series)
- Windows shared folder (Windows 98/Me/NT/2000/XP/Server 2003)
- Samba shared folder (UNIX/Linux)

This section describes how to set up a computer as an FTP server.
For instructions on how to configure a Windows and Samba shared folder, see "Setting Up a Computer as a File Server," in Chapter 5, "Using a NetBIOS Network." (See p. 5-16.)

IMPORTANT

- *To send data from the machine, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *Samba 2.2.8a or later is supported.*
- *This section describes only the procedures for setting up a computer to receive data sent from the machine. To send data from the machine to a server on the network, you must enter an address setting from the control panel.*
  For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.
- *The following procedures describe a sample FTP server setup. Depending on your environment, the actual setup procedure may differ.*

Windows 2000/XP/Server 2003

IMPORTANT

- *It is recommended that the network manager configure the FTP server.*
- *The use of Windows 2000 Server as an FTP server requires the installation of Microsoft Internet Information Services 5.0 (IIS 5.0). If IIS is not installed in the computer you are using, you will need to install IIS before entering these settings. For installation procedures, see the manuals provided with your operating system.*
- *The use of Windows XP Professional as an FTP server requires the installation of Microsoft Internet Information Services 5.1 (IIS 5.1). If IIS is not installed in the computer you are using, you will need to install IIS before entering these settings. For installation procedures, see the manuals provided with your operating system.*
- *The use of Windows Server 2003 as an FTP server requires the installation of Microsoft Internet Information Services 6.0 (IIS 6.0). If IIS is not installed in the computer you are using, you will need to install IIS before entering these settings. For installation procedures, see the manuals provided with your operating system.*
- *Verification of users for access to FTP servers is done by referencing the local account database of Windows 2000 Server/XP Professional/Server 2003 that is used as the FTP server. Therefore, it is not possible to use the account of a domain user registered in Windows 2000 Server/XP Professional/Server 2003 to send data directly from the machine to FTP servers in other domains.*
- *This section describes the procedures for using the default home directory under [Default FTP Site]. To use other settings, enter the FTP site and home directory by referring to the manual for IIS.*

1 Log on to Windows as a member of the group with access rights to the directory to be designated as the FTP site directory.

NOTE

Depending on your environment, the access rights settings for a drive or directory may differ. For details, see the Windows manual.

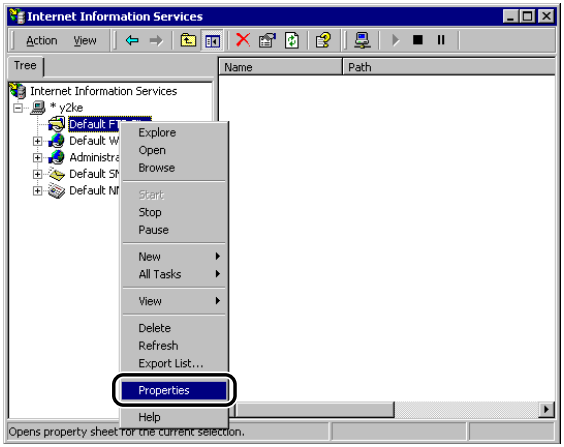
2 Start IIS.

❑ If you are using Windows 2000, on the [Start] menu, point to [Programs] → point to [Administrative Tools] → click [Internet Service Manager].
If you are using Windows XP, on the [Start] menu, click [Control Panel] → [Performance and Maintenance] → [Administrative Tools] → [Internet Information Services].
If you are using Windows Server 2003, on the [Start] menu, point to [Administrative Tools] → click [Internet Information Services Manager].

3 Enter the FTP site settings.

❑ Right-click the [Default FTP Site] icon → click [Properties].

For Windows 2000



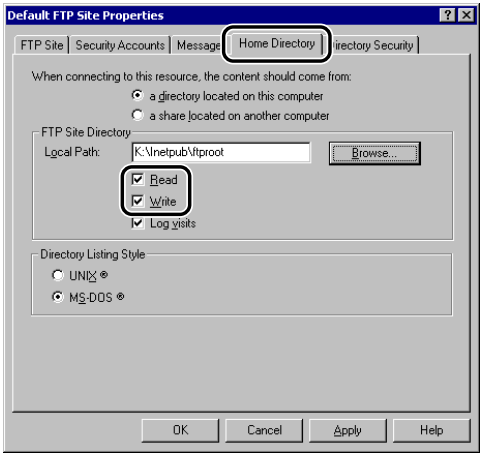
In Windows Server 2003, the [Default FTP Site] icon is displayed under [FTP Sites].

❑ In the [Default FTP Site Properties] dialog box, click the [Security Accounts] tab to display the [Security Accounts] sheet.

❑ If you are using Windows 2000, deselect [Allow Anonymous Connections].
If you are using Windows XP/Server 2003, deselect [Allow only anonymous connection].

❑ Click the [Home Directory] tab to display the [Home Directory] sheet → select both [Read] and [Write].

For Windows 2000



❑ Click [OK] to close the [Default FTP Site Properties] dialog box.

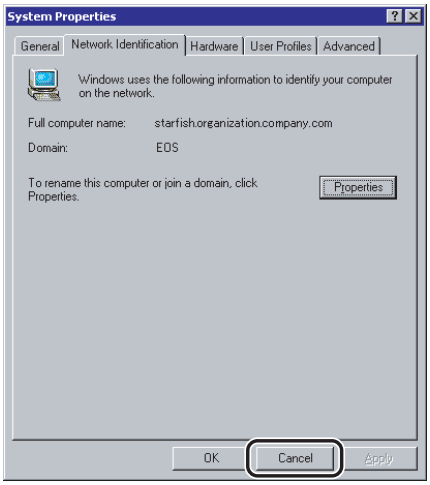
4 Confirm [Full computer name].

● **If you are using Windows 2000:**

❑ Right-click the [My Computer] icon on the screen → click [Properties].

❑ Click the [Network Identification] tab to display the [Network Identification] sheet → confirm [Full computer name].

❑ Click [Cancel] to close the [System Properties] dialog box.



● **If you are using Windows XP/Server 2003:**

❑ On the [Start] menu, right-click [My Computer] → click [Properties].

❑ Click the [Computer Name] tab to display the [Computer Name] sheet → confirm [Full computer name].

❑ Click [Cancel] to close the dialog box.

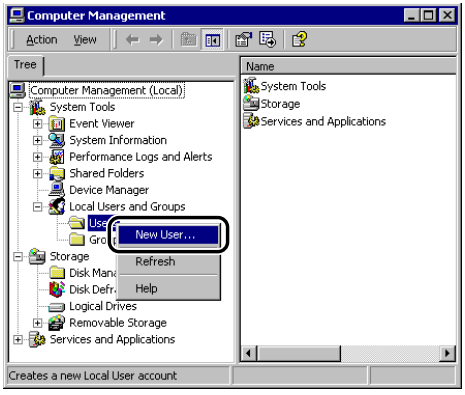
5 Set up the users and passwords for access to the FTP server.

❑ If you are using Windows 2000, right-click the [My Computer] icon → click [Manage].
If you are using Windows XP/Server 2003, on the [Start] menu, right-click [My Computer] → click [Manage].

The [Computer Management] window opens.

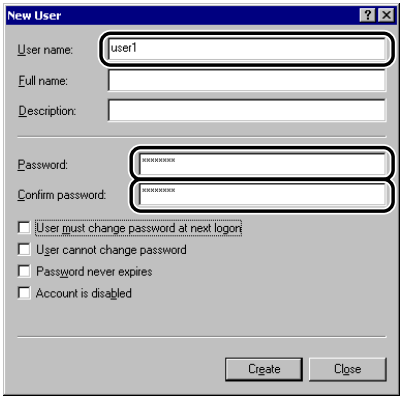
❑ Under [System Tools], double-click [Local Users and Groups] → right-click the [Users] folder → click [New User].

For Windows 2000



❑ In the [New User] dialog box, enter the user name in [User name] → enter the password in [Password] → re-enter the password in [Confirm Password].

For Windows 2000



Enter a user name and a password not longer than 24 alphanumeric characters.

If [User must change password at next logon] is selected, any new users added must change their passwords in order to send data from the machine. (You cannot change the password from the control panel.)

❑ Confirm the settings → click [Create].

❑ Close the [Computer Management] window.

NOTE

In the Active Directory environment, the procedures for setting up users differ from the above. For details, see the Windows manual.

6 Set a recipient address using the control panel.

Sample recipient setting:

- Server side settings:

  [Full Computer Name]: starfish.organization.company.com

  Create a directory named "share" in the specified FTP server's home directory "\Inetpub\ftproot", and then set "share" as the data destination.

- The machine's recipient settings:

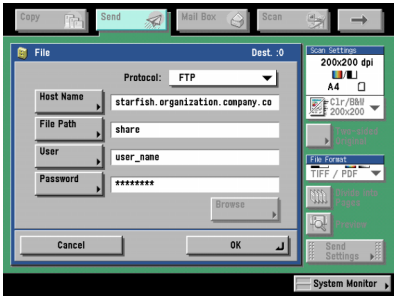
  [Protocol]: FTP

  [Host Name]: starfish.organization.company.com

  [File Path]: share

  [User]: User name entered in step 5

  [Password]: Password for the above user



IMPORTANT

- *To use [Full computer name] confirmed in step 4 as the host name for [Host Name] as shown in the above example, it is necessary to use a DNS server. (This applies even if the machine and the FTP server are in the same subnet.) If no DNS server is available, the host name setting should be specified using the IP address of the FTP server.*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. Use strings no more than 128 characters long for the corresponding items on the server.*
- *If you switch the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly.*
- *If the FTP port number is set to a value other than 21, specify the following for [Host Name]:*
  <IP address of FTP server>:<Port number>
  Example: 192.168.1.21:21000

NOTE

For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.

The settings for sending data to the FTP server are complete.

Windows NT 4.0

IMPORTANT

- *It is recommended that the network manager configure Windows NT Server 4.0.*
- *The use of Windows NT Server as an FTP server requires the installation of Microsoft Internet Information Server 4.0 (IIS 4.0). If IIS 4.0 is not installed in your computer, you will need to install IIS 4.0 before entering these settings. For installation procedures, see the manuals provided with your operating system.*
- *Verification of users for access to FTP servers is done by referencing the local account database of Windows NT 4.0 Server that is used as the FTP server. Therefore, it is not possible to use the account of a domain user registered in Windows NT 4.0 Server to send data directly from the machine to FTP servers in other domains.*
- *This section describes the procedures for using the default home directory under [Default FTP Site]. To use other settings, enter the FTP site and home directory by referring to the manual for IIS 4.0.*

1 Log on to Windows NT 4.0 as a member of the group with access rights to the directory to be designated as the FTP site directory.

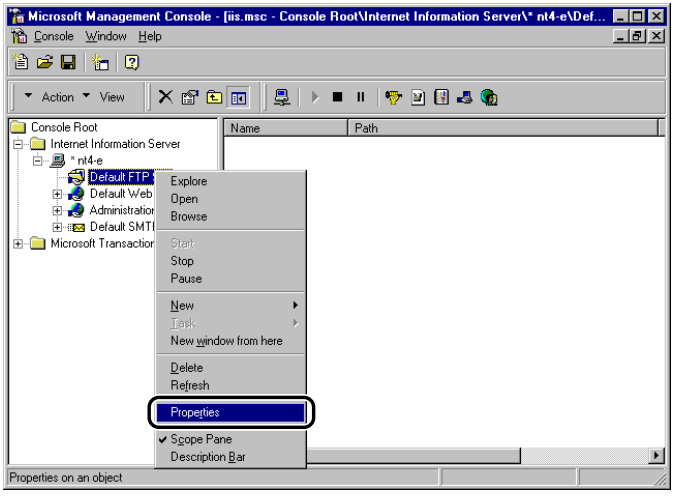
NOTE

Depending on your environment, the access rights settings for a drive or directory may differ. For details, see the Windows NT Server 4.0 manual.

2 Start IIS 4.0.

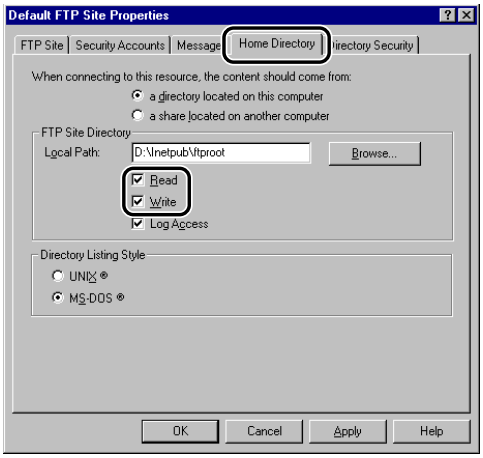
3 Enter the FTP site settings.

❑ Right-click the [Default FTP Site] icon → click [Properties].



❑ In the [Default FTP Site Properties] dialog box, click the [Security Accounts] tab to display the [Security Accounts] sheet → deselect [Allow Anonymous Connections].

❑ Click the [Home Directory] tab to display the [Home Directory] sheet → select both [Read] and [Write].



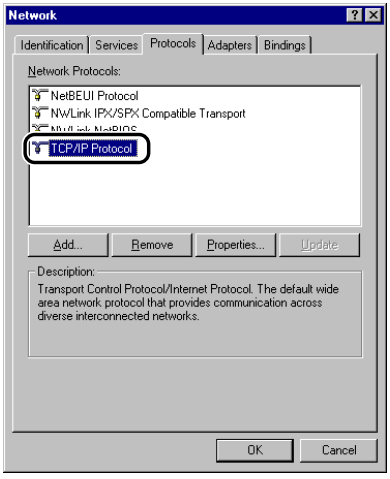
❑ Click [OK] to close the [Default FTP Site Properties] dialog box.

4 Confirm [Host Name] and [Domain].

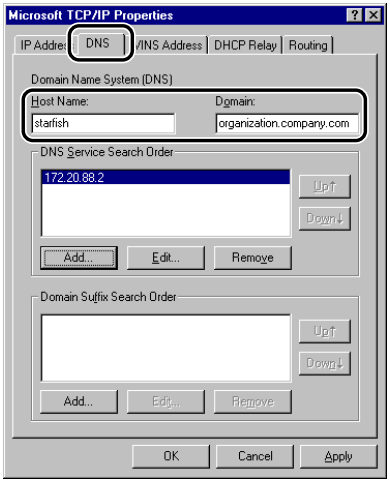
❑ Right-click the [Network Neighborhood] icon on the screen → click [Properties].

❑ In the [Network] dialog box, click the [Protocols] tab to display the [Protocols] sheet.

❑ In [Network Protocols], double-click [TCP/IP Protocol].



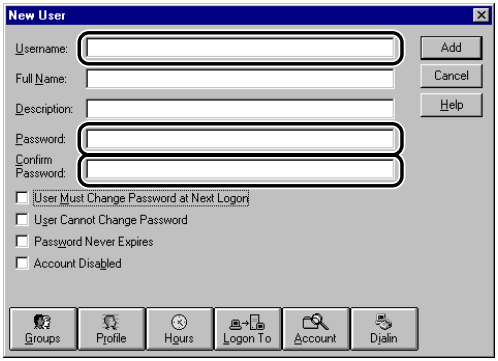
❑ Click the [DNS] tab to display the [DNS] sheet → confirm the host name and domain settings.



❑ Click [Cancel] to close the [Network] dialog box.

5 Set up the users and passwords for access to the FTP server.

- ❑ On the [Start] menu, point to [Programs] → point to [Administrative Tools] → click [User Manager for Domains].
- ❑ On the [User] menu, click [New User].
- ❑ Enter the user name in [Username] → enter the password in [Password] → re-enter the password in [Confirm Password].



Enter a user name and a password not longer than 24 alphanumeric characters.

If [User Must Change Password at Next Logon] is selected, any new users added must change their password in order to send data from the machine. (You cannot change the password from the control panel.)

- ❑ Confirm the settings you entered → click [Add].
- ❑ Exit the User Manager.

6 Set a recipient address using the control panel.

Sample recipient setting:

• Server side settings (set using the above procedure):

[Host name]: starfish

[Domain]: organization.company.com

Create a directory named "share" in the specified FTP server's home directory "\Inetpub\ftproot," and then set "share" as the data destination.

- The machine's recipient settings:

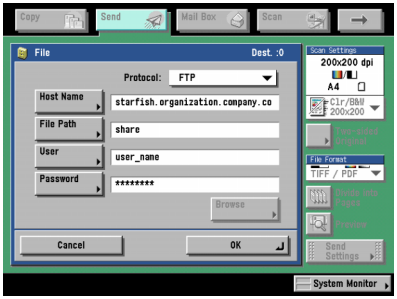
  [Protocol]: FTP

  [Host Name]: starfish.organization.company.com

  [File Path]: share

  [User]: User name entered in step 5

  [Password]: Password for the above user



IMPORTANT

- *To use the host name confirmed in step 4 for [Host Name] as shown in the above example, it is necessary to use a DNS server. (This applies even if the machine and the FTP server are in the same subnet.) If no DNS server is available, the host name setting should be specified using the IP address of the FTP server.*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. Use strings no more than 128 characters long for the corresponding items on the server.*
- *If you switch the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly.*
- *If the FTP port number is set to a value other than 21, specify the following for [Host Name]:*
  <IP address of FTP server>:<Port number>
  Example: 192.168.1.21:21000

NOTE

For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.

The settings for sending data to the FTP server are complete.

UNIX/Linux

IMPORTANT

- *UNIX users must have Solaris 2.6 or later installed in order to use the computer as an FTP server. Linux users must have Red Hat Linux 7.2 or later installed in order to use the computer as an FTP server.*
- *In some environments, detailed settings may be required in order to use FTP. For details, consult your network manager.*

1 Log in to a workstation as a superuser.

2 Set up the users who send documents from the machine, and their passwords.

Enter a user name and a password not longer than 24 alphanumeric characters.

3 Create a shared directory to be used for recipient addresses, and then enable read access and write access by the users who will be sending data.

4 Set a recipient address using the control panel.

Sample recipient setting:

- Server side settings:

[Host Name]: starfish

[Domain]: organization.company.com

The user's home directory is /home/hsato, and /home/hsato/share is the data destination.

- The machine's recipient settings:

  [Protocol]: FTP

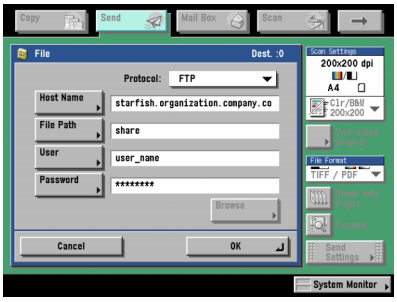
  [Host Name]: starfish.organization.company.com

  [User]: User name entered in step 2

  [Password]: Password for the above user

  [File Path]: Enter one of the following:

  share (when using relative path)
  /home/hsato/share (when using absolute path)



IMPORTANT

- *To use the host name of the above example for [Host Name], it is necessary to use a DNS server. (This applies even if the machine and the FTP server are in the same subnet.) If no DNS server is available, the host name setting should be specified using the IP address of the FTP server.*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. Use strings no more than 128 characters long for the corresponding items on the server.*
- *If you switch the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly.*
- *If the FTP port number is set to a value other than 21, specify the following for [Host Name]:*
  <IP address of FTP server>:<Port number>
  Example: 192.168.1.21:21000

NOTE

For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.

The settings for sending data to the FTP server are complete.

Mac OS X

1 Log in to Mac OS X as Administrator.

2 Start the FTP services under Mac OS X.

- ❑ Click the [System Preferences] icon in [Dock].
- ❑ Click the [Sharing] icon in the [System Preferences] window.
- ❑ Select [Allow FTP access].
- ❑ Click [Show All] on the toolbar.

3 Specify the user to whom you want to send data, and then the password.

- ❑ Click the [Users] icon in the [System Preferences] window.
- ❑ In the [Users] window, enter the name of the user to whom you want to send data from the machine through Mac OS X → enter the password.

  Enter a user name and a password not longer than 24 alphanumeric characters.
- ❑ Close the [Users] window.

4 Create a shared folder to which files are to be sent.

Sample setting:

Create a folder named "iR_Folder" in the [Public] folder in the [Home] folder.

5 Grant access to the shared folder created in step 4.

- ❑ Click to select the shared folder → select [Show Info] from the [File] menu.
- ❑ Select [Privileges] from [Show].
- ❑ Enable read & write access to the folder by the owner and members of a group to which the owner belongs.
- ❑ Close the [Info] window.

6 Set a recipient address using the control panel.

Sample recipient setting:

- Server side settings (set using the above procedure):
  Create a folder named "iR_Folder" in the [Public] folder in the [Home] folder of the user named "yoko," and then specify the iR_Folder as the folder to which files are sent.
- The machine's recipient settings:

[Protocol]: FTP

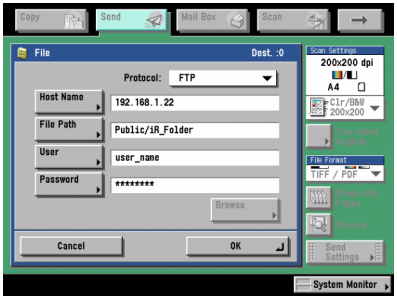
[Host Name]: IP address of Macintosh

[User]: User name entered in step 3

[Password]: Password for the above user

[File Path]: Enter one of the following:

Public/iR_Folder (If you enter a relative path)
/Users/yoko/Public/iR_Folder (If you enter an absolute path)



IMPORTANT

- *Up to 128 alphanumeric characters can be entered for [File Path] on the control panel. Use a string no more than 128 characters long for the item.*
- *If you switch the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly.*
- *If the FTP port number is set to a value other than 21, specify the following for [Host Name]:*
  <IP address of FTP server>:<Port number>
  Example: 192.168.1.21:21000

NOTE

For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.

The settings for sending data to the FTP server are complete.

FTP Server for iW Gateway

NOTE

An FTP server for iW Gateway is required for receiving data from the machine, when used with iW Gateway.

1 Set up the FTP server for iW Gateway.

For details about the settings, see the *iW Gateway User's Guide*.

2 On the FTP server for iW Gateway, specify the folder to store data sent from the machine.

For details about the settings, see the *iW Gateway User's Guide*.

NOTE

- *Up to 128 alphanumeric characters can be entered for a folder name.*
- *Enter a user name and a password not longer than 24 alphanumeric characters.*

3 On the FTP server for iW Gateway, export destination data.

For details about the settings, see the *iW Gateway User's Guide*.

IMPORTANT

- *A DNS server is needed to use an FQDN format (for example, starfish.organization.company.com) for the FTP server address. (A DNS server is also required if the machine and the FTP server are in the same subnet.) If you have not set up a DNS server, use IP addresses.*
- *Up to 128 alphanumeric characters can be entered for an FTP server address of the FQDN format.*

4 Use the web browser (Remote UI) of the machine to import the destination data exported in step 3 into the machine.

- ❑ Click [Add. Func.] of the web browser (Remote UI) → click [Import/Export].
- ❑ Click [Import] at the right window.
- ❑ Select the address book of the import destination from [Address Book].
- ❑ Select [Append] or [Overwrite] from [Import Method] to append the data to the address book or overwrite the address book with the data.

❑ In [File Path], enter the path to the folder storing the destination data exported in step 3.

❑ Select [Custom Format] from [File Format].

❑ Click [Start Import].

IMPORTANT

- *If the System Manager ID and password of the machine are set, the dialog box for entering a user name and password appears; enter the System Manager ID in [User Name] and password in [Password].*
- *If you switch the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly.*
- *If the FTP port number is set to a value other than 21, specify the following for [Host Name]:*
  <IP address of FTP server>:<Port number>
  Example: 192.168.1.21:21000

NOTE

For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.

The settings for sending data to the FTP server for iW Gateway are complete.

Using a NetWare Network (Windows)

4
CHAPTER

This chapter describes settings and procedures for using the machine with a NetWare network.

NetWare Network Setup Procedures 4-2
NetWare Print Service Settings 4-3
Types of Print Service 4-4
Setup Using NetWare Administrator or PCONSOLE 4-5
Protocol Settings 4-9
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Connecting to a NetWare Network 4-17
Printer Connection Method 4-17
Setting Up a Computer as a File Server 4-18

NetWare Network Setup Procedures

To use a NetWare network, it is necessary to perform the following procedures.

1 NetWare Print Service Settings ("NetWare Print Service Settings," on p. 4-3.)

Specify the NetWare print service settings. (To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)
To specify the settings from the computer, use:

- NWADMIN or PCONSOLE (Novell software provided with NetWare)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

2 Protocol Settings (See "Protocol Settings," on p. 4-9.)

Specify the protocol settings. To specify the settings, use:

- The machine's control panel
- A web browser (Remote UI)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

3 Computer Settings for Printing (See "Setting Up a Computer for Printing/Sending a Fax," on p. 4-17.)

Specify the settings of each computer you use for printing or sending a fax. (To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)

4 Computer Settings for a File Server (See "Setting Up a Computer as a File Server," on p. 4-18.)

Specify the settings of the computer receiving data sent from the machine. (To send data, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)

IMPORTANT

- *If you are using the optional Color Network Printer Unit, for steps 1 to 3, see the manual provided with the optional Color Network Printer Unit.*
- *It is recommended that the network manager perform steps 1, 2, and 4 above.*
- *To configure settings with software other than the control panel of the machine, NWADMIN, PCONSOLE, or NetSpot Device Installer, TCP/IP protocol must be supported by your network environment.*

NetWare Print Service Settings

To print using a NetWare network, you need to specify print service settings including print server and queue settings. You can use any of the software listed below to specify the print service settings from your computer.

- NWADMIN or PCONSOLE (Novell software provided with NetWare)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

IMPORTANT

- *To specify the print service settings from NWADMIN or NetSpot Device Installer, the computer must have Novell Client (NetWare Client by Novell) installed. To specify the print service settings using NetSpot Console, the computer with NetSpot Console installed must have Novell Client (NetWare Client by Novell) installed, and TCP/IP protocol must be supported by your network environment.*
- *The following procedures describe a sample NetWare setup. Depending on your environment, the actual setup procedure may differ.*

NOTE

- *You can specify the print server settings on the NetWare server and the print service settings of the machine at the same time, using NetSpot Device Installer or NetSpot Console. For instructions on how to specify the settings, see each online help.*
- *For more information on NetSpot Device Installer or NetSpot Console, see Chapter 7, "Using the Network and Device Settings with Utilities."*

Types of Print Service

Before specifying print service settings, refer to the following descriptions to determine the type of print service you are using.

NOTE

- *Normally with NetWare 4.x or later, it is recommended that you use NDS print service. With NetWare 3.2, it is recommended that you use Bindery print service. This manual describes procedures for these two combinations only.*
- *With NetWare 5.x, you can use NDPS (Novell Distributed Print Services). For NDPS settings, see the NetWare manual.*
- *With NetWare 6, you can use iPrint print service. For iPrint settings, see the NetWare manual.*

■ NDS (Novell Directory Service) and Bindery Mode

The machine network supports both the NDS and Bindery mode.
Determine the appropriate mode according to the network environment you are using. (If you are using NetWare 3.2, only the Bindery mode is available.)

■ Queue Server Mode and Remote Printer Mode

The machine supports both the queue server mode and the remote printer mode.

• Queue Server Mode

If the machine is used in the queue server mode, all print server functions are provided by the machine itself; no other print server hardware or software is required. In the NDS queue server mode (NDS PServer), the NDS print server is used for printing. In the Bindery queue server mode (Bindery PServer), the Bindery print server is used for printing. In the queue server mode, a separate NetWare user operating license is required for each machine.

• Remote Printer Mode

In the remote printer mode, NetWare print server is required to control the printer. The machine prints using the NDS print server in the NDS remote printer mode (NPrinter), and the Bindery print server in the Bindery remote printer mode (RPrinter).

Setup Using NetWare Administrator or PCONSOLE

Using NetWare Administrator in the NDS Queue Server Mode or the Remote Printer Mode (NetWare 4.x or Later)

1 Log in to NetWare as Administrator (or equivalent access) → start NetWare Administrator.

2 Execute Quick Setup.

❑ Select the container object for the printer object you want to create → click [Print Services Quick Setup] on the [Tools] menu.

3 Specify the [Print Server name], [Printer], and [Print Queue] settings.

❑ Enter the print server name in [Print Server name].

To use an existing print server, click the button to the right of [Print Server name] → select a print server from the list box.

❑ Under [Printer], enter the printer name in [Name].

❑ From [Type], select the printer connection method.

If you are using the queue server mode, select [Other/Unknown] from [Type].

If you are using the remote printer mode, select [Parallel] from [Type] → click [Communication] to open the [Parallel Communication] dialog box → select [LPT1] from [Port], and [Manual load] under [Connection type]. Under [Interrupts], specify the appropriate setting for your environment → click [OK] to close the [Parallel Communication] window.

❑ Under [Print Queue], enter the queue name in [Name]. In [Volume], enter the volume in which the queue is placed.

To use an existing print server, click the button to the right of [Volume] → select a print server from the list box.

❑ Click [Create] → exit NetWare Administrator.

NOTE

Be sure to remember the name of the print server. You need it to specify the machine's protocol settings.

4 If you are using the remote printer mode, start the print server.

❑ If you are using the NetWare file server as a print server, enter <Load PSERVER.NLM> in the file server → press [ENTER] on the keyboard.

NOTE

If you are using the queue server mode, this step is not required.

NetWare print service settings are complete. Proceed to "Protocol Settings," on p. 4-9.

Using PCONSOLE in the Queue Server Mode or Remote Printer Mode in the Bindery Mode (NetWare 3.2)

1 Log in to NetWare as Supervisor, and then start PCONSOLE.

2 If you have not set up a print server yet, set up the print server.

❑ On the [Available Options] menu, select [Print Server Information] → press [ENTER] on the keyboard.

❑ Press [INSERT] on the keyboard.

❑ Enter the name of the print server you are setting up → press [ENTER] on the keyboard.

❑ Press [ESC] on the keyboard to return to the [Available Options] menu.

NOTE

Be sure to remember the name of the print server. You need it to specify the printer's protocol settings.

3 Set up a Queue, and then assign the print server to the queue.

❑ On the [Available Options] menu, select [Print Queue Information] → press [ENTER] on the keyboard.

❑ Press [INSERT] on the keyboard.

❑ Enter the name of the queue you are setting up → press [ENTER] on the keyboard.

❑ Select the name of the queue you specified → press [ENTER] on the keyboard.

❑ Select [Queue Servers] → press [ENTER] on the keyboard.

❑ Press [INSERT] on the keyboard.

❑ Select the print server you set up in step 2 → press [ENTER] on the keyboard.

❑ Press [ESC] on the keyboard repeatedly until you return to the [Available Options] menu.

4 Assign the printer to the print server.

❑ On the [Available Options] menu, select [Print Server Information] → press [ENTER] on the keyboard.

❑ Select the print server you set up in step 2 → press [ENTER] on the keyboard.

❑ Select [Print Server Configuration] → press [ENTER] on the keyboard.

❑ Select [Printer Configuration] → press [ENTER] on the keyboard.

❑ From [Configured Printers], select the number of the printer you want to use → press [ENTER] on the keyboard.

5 Specify the printer name, type, etc.

❑ In [Name], enter the name you want to use for the printer → press [ENTER] on the keyboard.

❑ If you are using the queue server mode, select [Defined elsewhere] from [Type].
If you are using the remote printer mode, select [Remote Parallel, LPT1] from [Type].

❑ Specify the remaining items → press [ESC] on the keyboard.

❑ In the confirmation box that opens, select [Yes] → press [ENTER] on the keyboard.

❑ Press [ESC] on the keyboard to return to the [Print Server Configuration] Menu.

6 Assign a queue to the printer.

❑ Select [Queues Serviced by Printer] → press [ENTER] on the keyboard.

❑ Select the name of the printer you set up in step 5 → press [ENTER] on the keyboard.

❑ Press [INSERT] on the keyboard.

❑ Select the queue you set up in step 3 → press [ENTER] on the keyboard.

7 **Press [ESC] on the keyboard repeatedly until you return to the [Exit PCONSOLE] window → select [Yes] to quit PCONSOLE.**

8 **If you are using the remote printer mode, start the print server.**

- ❑ If you are using a NetWare file server as a print server, enter <LOAD PSERVER.NLM (print server name)> on the file server → press [ENTER] on the keyboard.
- ❑ If you are using a dedicated print server, enter <PSERVER.EXE> → enter the print server name on the print server → press [ENTER] on the keyboard.

NOTE

This step is not required if you are using the queue server mode.

NetWare print service settings are complete. Proceed to "Protocol Settings," on p. 4-9.

Protocol Settings

You can specify the protocol settings for the machine by using any of the following:

- The machine's control panel
- A web browser (Remote UI)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

IMPORTANT

- *To configure settings with software other than the control panel of the machine or NetSpot Device Installer, TCP/IP protocol must be supported by your network environment.*
- *Some items cannot be set using NetSpot Device Installer or NetSpot Console. For details about items that can be set with NetSpot Device Installer or NetSpot Console, see "Network Setting Items," on p. 9-2.*
- *The following procedure describes sample settings using the control panel.*

NOTE

- *For instructions on how to enter settings using a web browser (Remote UI), see Chapter 3, "Customizing Settings," in the Remote UI Guide.*
- *For more information on NetSpot Device Installer or NetSpot Console, see Chapter 7, "Using the Network and Device Settings with Utilities."*

Settings from the Control Panel

The procedure for specifying the settings from the control panel is as follows.

IMPORTANT

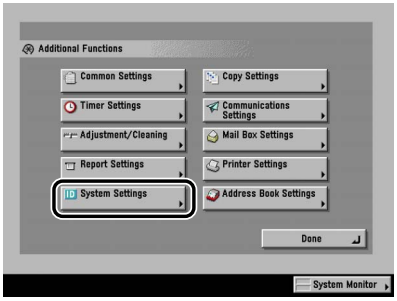
Settings made from the control panel become effective when the machine is restarted after the procedure.

NOTE

For instructions on how to enter characters using the touch panel display, see Chapter 2, "Basic Operations," in the Reference Guide.

1 Press .

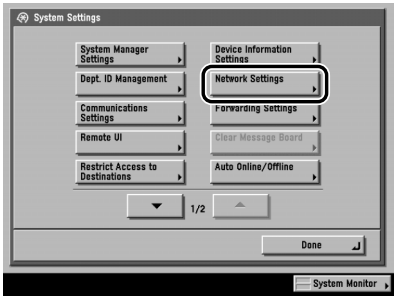
2 Press [System Settings].



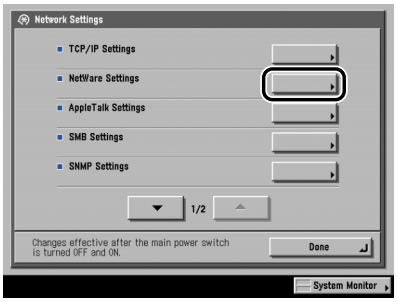
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

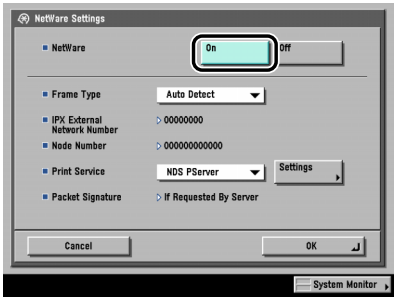
3 Press [Network Settings].



4 Press [NetWare Settings].



5 Select [On] for <NetWare>.



6 Select the frame type for your environment from the Frame Type drop-down list.

If you select [Auto Detect], the frame type is automatically determined.

7 Select the print service from the Print Service drop-down list.

Specify the same settings specified in "NetWare Print Service Settings," on p. 4-3.

NOTE

The following print services are available:

- *[Bindery PServer]:*
  Used in the queue server mode (Bindery mode print service).
- *[RPrinter]:*
  Used in the remote printer mode (Bindery mode print service).
- *[NDS PServer]:*
  Used in the queue server mode (NDS print service).
- *[NPrinter]:*
  Used in the remote printer mode (NDS print service).

8 Press [Settings].

The screen for specifying the print service settings is displayed.

NOTE

You can specify the print service settings either by selecting the desired options from the list on the screen displayed by pressing [Browse], or by entering the desired character string for each item. To select from the Browse screen, proceed to step 9; to enter character strings, skip to step 10.

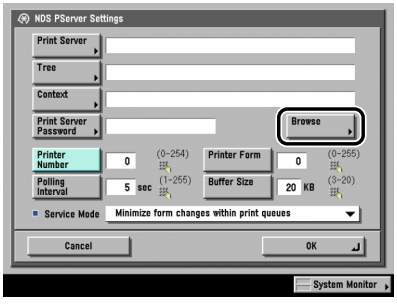
9 On the Browse screen, specify the print service details.

Specify the same tree, context, file server, and print server names specified in "NetWare Print Service Settings," on p. 4-3. (Settings differ depending on the print service. For print service settings, see "Network Setting Items," on p. 9-2.)

● Setting NDS PServer or NPrinter (If the browse right is not limited to the specific user):

❑ Press [Browse].

Screen for setting NDS PServer



❑ Press [Skip Log In] in the Browse screen.

If the browse right is not limited to the specific user, you can specify the print service without having to log in to NetWare.

❑ Select the tree to which the desired print server belongs → press [Down].

❑ Select the context to which the desired print server belongs → press [Down].

❑ Select the desired print server → press [OK].

❑ For NDS PServer, specify each item on the screen for setting NDS PServer if necessary.

❑ Press [OK] to return to the screen for setting NetWare.

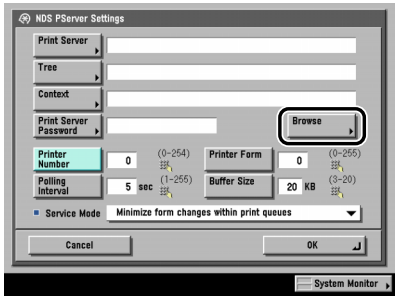
❑ Press [OK].

❑ Skip to step 11.

● **Setting NDS PServer or NPrinter (If the browse right is limited to the specific user):**

❑ Press [Browse].

Screen for setting NDS PServer



❑ In the Browse screen, select the tree to which you log in → press [Down].

❑ Select the context to which you log in → press [Down] repeatedly if necessary.

❑ Press [Log In].

If the browse right is limited to the specific user, it is necessary to log in to NetWare as a user to whom the browse right is granted.

❑ In the Enter Network Password screen, enter the name and password of a user to whom the browse right is granted → press [OK].

Enter a user name prefixed with CN=. If the password is not specified, leave [Password] blank.

❑ Select the tree to which the desired print server belongs → press [Down].

❑ Select the context to which the desired print server belongs → press [Down].

❑ Select the desired print server → press [OK].

❑ For NDS PServer, specify each item on the screen for setting NDS PServer if necessary.

❑ Press [OK] to return to the screen for setting NetWare.

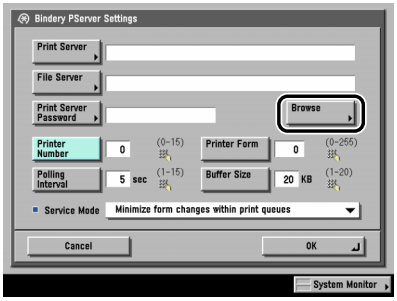
❑ Press [OK].

❑ Skip to step 11.

● **Setting Bindery PServer or RPrinter:**

❑ Press [Browse].

Screen for setting Bindery PServer



❑ In the Browse screen, select the file server to which the desired print server belongs → press [Down].

❑ In the Enter Network Password screen, enter the name and password of a user on the file server → press [OK].

If the password is not specified, leave [Password] blank.

❑ Select the desired print server → press [OK].

❑ For Bindery PServer, specify each item on the screen for setting Bindery PServer if necessary.

❑ Press [OK] to return to the screen for setting NetWare.

❑ Press [OK].

❑ Skip to step 11.

IMPORTANT

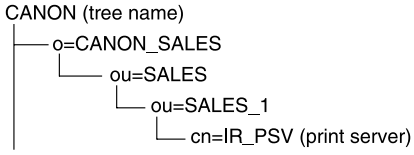
If you use [Browse] to specify each item, press [Browse] after the expiration of the time specified in "Startup Time Settings," on p. 3-30 (the default setting startup time is '60 seconds').

10 Enter the desired character string for the print service details.

Specify the same tree, context, file server, and print server names specified in "NetWare Print Service Settings," on p. 4-3. (Settings differ depending on the print service. For print service settings, see "Network Setting Items," on p. 9-2.)

- **Setting NDS PServer or NPrinter:**
  - ❑ Press [Print Server] to enter the name of the desired print server.
  - ❑ Press [Tree] to enter the name of the tree to which the desired print server belongs.
  - ❑ Press [Context] to enter the name of the context to which the desired print server belongs.
  - ❑ For NDS PServer, specify each of the other items if necessary.
  - ❑ Press [OK] to return to the screen for setting NetWare.
  - ❑ Press [OK].

Sample settings:



In an environment like the one above, the tree name and the context name are entered as follows:

Tree: <CANON>

Context: <ou=SALES_1.ou=SALES.o=CANON_SALES>
or <SALES_1.SALES.CANON_SALES>

- **Setting Bindery PServer or RPrinter:**
  - ❑ Press [Print Server] to enter the name of the desired print server.
  - ❑ Press [File Server] to enter the name of the file server to which the desired print server belongs.
  - ❑ For Bindery PServer, specify each of the other items if necessary.
  - ❑ Press [OK] to return to the screen for setting NetWare.
  - ❑ Press [OK].

11 Press [Done] repeatedly until the Additional Functions screen closes.

12 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The protocol settings are complete.

Setting Up a Computer for Printing/Sending a Fax

After you have completed NetWare print service settings and printer protocol settings, you are ready to set up each of the computers for printing or sending a fax.

IMPORTANT

To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

Connecting to a NetWare Network

In order to use the NetWare network, all computers that will perform printing or sending a fax need to have NetWare client software installed. For details, see your NetWare and operating system manuals.

Printer Connection Method

Install the driver according to the following procedures indicated in the manual for each driver:

- If you want to use the PCL printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *PCL Driver Guide*.
- If you want to use the PS printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *PS Driver Guide*.
- If you want to use the UFR printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *UFR Driver Guide*.
- If you want to use the fax driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *Fax Driver Guide*.

When the dialog box for selecting the port appears during installation, click [Use Network Printer] → [Settings]. From the list, select the print queue that you created in "NetWare Print Service Settings," on p. 4-3.

Setting Up a Computer as a File Server

To send data from the machine to a computer on your network, you need to specify the settings of the computer for receiving data.

This section describes how to set up a computer as a file server.

IMPORTANT

- *To send data from the machine, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *To send a file to the NetWare server, make the following NetWare settings of the machine. For instructions on how to specify the protocol settings, see "Protocol Settings," on p. 4-9.*
  - *<NetWare>: [On]*
  - *The Frame Type drop-down list: Frame type suitable for your environment*
- *This section describes only the procedures for setting up a computer receiving data sent from the machine. To send data from the machine to a server on the network, you must enter an address setting from the control panel. For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending Guide.*
- *In some environments, additional detailed settings such as authority settings may be required. For details, consult the network manager of the environment you are using.*

1 Log in to NetWare as Administrator (or as a user of equivalent authority).

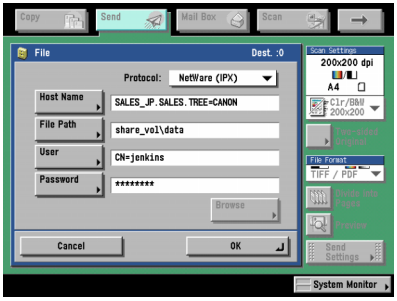
2 Set up the users and passwords for sending data from the machine.

Enter a user name and a password not longer than 24 alphanumeric characters.

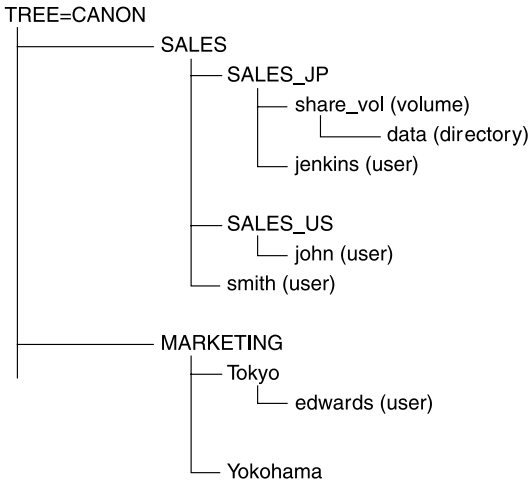
3 Create a directory to be used for recipient addresses, and then enable read access and write access by the users who will be sending data.

4 Set a recipient address from the control panel.

There are two methods for specifying the recipient address settings. You can select the desired values from the list displayed by pressing [Browse]. Or you can press each key to enter the desired value for each item.



Sample recipient settings: NDS Mode Example



If you send data to the "data" under "share_vol" in the above tree structure, the settings of the host name and the file path differ depending on the location of a user account.

- Example 1 If "SALES_JP" contains the user account "jenkins"

  [Host Name]: SALES_JP.SALES.TREE=CANON

  [File Path]: share_vol\data

  [User]: CN=jenkins

  [Password]: (Password for the above user)

- Example 2 If "SALES_US" contains the user account "john"

  [Host Name]: SALES_US.SALES.TREE=CANON

  [File Path]: share_vol.SALES_JP.\data (One dot is required before \data.)

  [User]: CN=john

  [Password]: (Password for the above user)

- Example 3 If "SALES" contains the user account "smith"

  [Host Name]: SALES.TREE=CANON

  [File Path]: share_vol.SALES_JP\data

  [User]: CN=smith

  [Password]: (Password for the above user)

- Example 4 If "Tokyo" contains the user account "edwards"

  [Host Name]: Tokyo.MARKETING.TREE=CANON

  [File Path]: share_vol.SALES_JP.SALES..\data
  (Two dots are required before \data.)

  [User]: CN=edwards

  [Password]: (Password for the above user)

Sample recipient settings: Bindery Mode Example:

- Server side settings:

  [File Server Name]: TOPMAX_SERVER

  Set \CSG in the SYS volume as the recipient.

- The machine's address settings:

  [Protocol]: NetWare (IPX)

  [Host Name]: TOPMAX_SERVER

  [File Path]: SYS\CFG

  [User]: (User name entered in step 2)

  [Password]: (Password for the above user)

IMPORTANT

- *If you use [Browse] to specify each item, press [Browse] after the expiration of the time specified in "Startup Time Settings," on p. 3-30 (the default setting startup time is '60 seconds').*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. Use strings no more than 128 characters long for the corresponding items on the server.*
- *If you change the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly, or you may not be able to browse the directories.*
- *In NDS mode, take notice of the following:*
  - *For the host name, specify the context by which a user logs in.*
  - *For the file path, specify the relative path from the user context. You may omit the "xx=" portion, but the ".TREE=" portion with the tree name may not be omitted.*
  - *Enter a user name prefixed with "CN=."*
  - *Unless the same directory tree contains the user account name by which a user logs in and the volume object to which data is sent, dots are required according to the layer of the relative path. For example, one dot is required to indicate the layer one level above (Example 2), and two dots are required to indicate the layer two levels above (Example 4).*

NOTE

For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending Guide.

The settings for sending data to the file server are complete.

5 CHAPTER

Using a NetBIOS Network

This chapter describes settings and procedures for using the machine with a NetBIOS network.

NetBIOS Network Setup Procedures 5-2

Protocol Settings 5-3

Settings from the Control Panel 5-3

Setting Up a Computer for Printing/Sending a Fax 5-10

Connecting to a TCP/IP Network 5-10

Connecting to a NetBIOS Network 5-10

Printer Connection Method 5-14

Setting Up a Computer as a File Server 5-16

Connecting to a TCP/IP Network 5-16

Connecting to a NetBIOS Network and Configuring a Shared Folder 5-17

NetBIOS Network Setup Procedures

To use a NetBIOS network, it is necessary to perform the following procedures.

1 **Protocol Settings (See "Protocol Settings," on p. 5-3.)**

Specify the protocol settings. To specify the settings, use:

- The machine's control panel
- A web browser (Remote UI)
- A web browser (NetSpot Console) (Canon utility)

2 **Computer Settings for Printing (See "Setting Up a Computer for Printing/Sending a Fax," on p. 5-10.)**

Specify the settings of each computer you use for printing or sending a fax. (To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)

3 **Computer Settings for a File Server (See "Setting Up a Computer as a File Server," on p. 5-16.)**

Specify the settings of the computer receiving data sent from the machine. (To send data, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.)

IMPORTANT

- *If you are using the optional Color Network Printer Unit, for steps 1 and 2, see the manual provided with the optional Color Network Printer Unit.*
- *It is recommended that the network manager perform steps 1 and 3 above.*
- *The only base protocol supported by a NetBIOS network is TCP/IP. (SMB is used as the print application.) NetBEUI is not supported with the machine.*
- *Use the control panel or NetSpot Device Installer if you configure the TCP/IP settings for the first time. After configuring the settings, you can change the content by using a web browser (Remote UI) or a web browser (NetSpot Console).*

Protocol Settings

You can specify the protocol settings for the machine by using any of the following:

- The machine's control panel
- A web browser (Remote UI)
- A web browser (NetSpot Console) (Canon utility)

IMPORTANT

- *If you configure the TCP/IP settings for the first time, use the control panel of this machine or NetSpot Device Installer. After configuring the settings, you can change the content by using a web browser (Remote UI) or a web browser (NetSpot Console).*
- *Some items cannot be set using NetSpot Device Installer or NetSpot Console. For details about items that can be set with NetSpot Device Installer or NetSpot Console, see "Network Setting Items," on p. 9-2.*

NOTE

- *For instructions on how to enter settings using a web browser (Remote UI), see Chapter 3, "Customizing Settings," in the Remote UI Guide.*
- *For more information on NetSpot Device Installer or NetSpot Console, see Chapter 7, "Using the Network and Device Settings with Utilities."*

Settings from the Control Panel

The procedures for specifying the settings from the control panel are as follows.

IMPORTANT

Settings specified from the control panel become effective after the machine is restarted, after the procedure.

NOTE

For instructions on how to enter characters using the touch panel display, see Chapter 2, "Basic Operations," in the Reference Guide.

TCP/IP Settings

1 Specify the TCP/IP settings.

If you have not entered the TCP/IP settings yet, enter them now. (see "TCP/IP Settings," on p. 3-4 in Chapter 3, "Using a TCP/IP Network").

Next, specify the SMB and WINS settings.

SMB and WINS Settings

To use the machine on a NetBIOS network, specify the SMB settings.

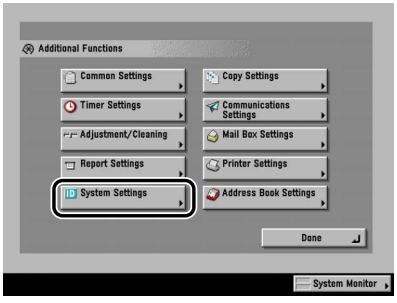
To resolve a name with WINS, specify the WINS settings that follow.

NOTE

WINS (Windows Internet Name Service) is a service for associating a NetBIOS name (which is a computer name or printer name on a NetBIOS network) with an IP address.
To use WINS, a WINS server is required.

1 Press ⊛.

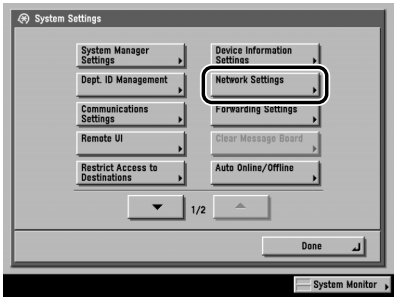
2 Press [System Settings].



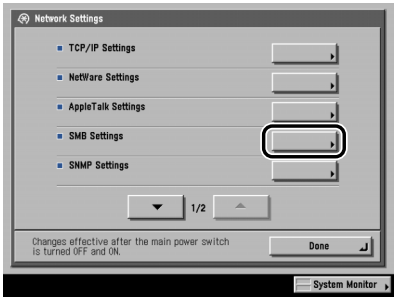
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

3 Press [Network Settings].



4 Press [SMB Settings].

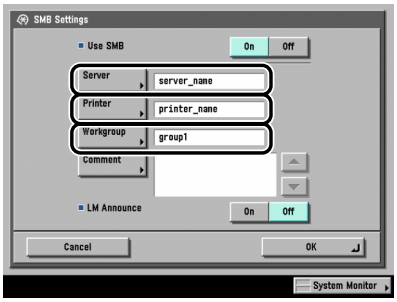


5 If you want to print or send a fax via a NetBIOS network, select [On] for <Use SMB>.

IMPORTANT

To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

6 Specify the [Server], [Printer], and [Workgroup] settings.



[Server]:
Enter the name of a computer that the machine connects to. Be sure to enter a unique name that does not exist as a name for another computer or printer on the same network.

[Printer]:
Enter the printer name of the machine.

[Workgroup]:
Enter the name of the workgroup the machine belongs to.
If there is no workgroup on your environment, create a workgroup in the Windows environment, and then enter the workgroup name.

IMPORTANT

- *You cannot enter the domain name as the workgroup name.*
- *Enter the printer name of up to 12 characters in [Printer] when printing from Windows NT.*
- *You cannot enter a character string including blanks in [Server], [Printer], and [Workgroup].*

7 Press [Comment].

Enter a comment about the printer if necessary. If you display the printer information, the comment you specified here appears.

8 Specify <LM Announce>.

● **If you want the machine to notify the LAN Manager of its existence on the network:**

❑ Select [On].

● **If you do not want the machine to notify the LAN Manager of its existence on the network:**

❑ Select [Off].

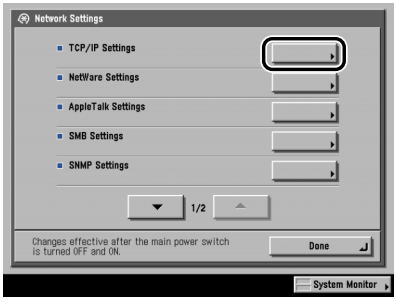
NOTE

- *<LM Announce> is provided to enable the LAN Manager to refer to the machine.*
- *If the LAN Manager does not have to refer to the machine, you can control the traffic over your network by selecting [Off].*

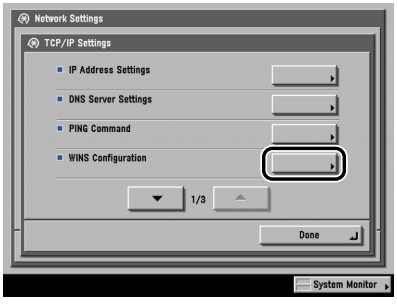
9 Confirm the settings you specified → press [OK].

The display returns to the Network Settings screen.

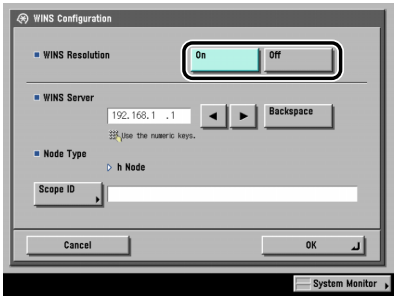
10 To specify the WINS settings, press [TCP/IP Settings]. Otherwise, skip to step 16.



11 Press [WINS Configuration].



12 To resolve the name with WINS, select [On]. Otherwise, select [Off].



If you select [Off], skip to step 14.

13 Specify the IP address of a WINS server.

IMPORTANT

If DHCP determines the IP address, the IP address obtained from a DHCP server is overwritten with the IP address of a WINS server (obtained from the DHCP server), whenever possible.

14 Specify the [Scope ID] setting.

Enter the scope ID if necessary.

The scope ID is an identifier for determining the range available to a printer or computer. Regardless of the [WINS Configuration] setting, a scope ID is referred to from the network.

IMPORTANT

- *If you set a scope ID, the machine cannot communicate with any computer whose scope ID is different from the scope ID you set here.*
- *If any scope ID is not set on computers in your network environment, leave this setting blank.*

15 Confirm the settings you specified → press [OK].

The display returns to the TCP/IP Settings screen.

16 Press [Done] repeatedly until the Additional Functions screen closes.

17 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The protocol settings are complete.

Setting Up a Computer for Printing/Sending a Fax

After you have completed the protocol settings, you are ready to set up each of the computers for printing or sending a fax.

IMPORTANT

To print or send a fax from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

Connecting to a TCP/IP Network

All computers that use the machine for printing or sending a fax must have TCP/IP client software installed and must be enabled for TCP/IP network use. For details, see the manuals provided with the operating system.

Connecting to a NetBIOS Network

All computers that use the machine for printing or sending a fax must be enabled for NetBIOS network use.
See the procedures referenced below to set the computers.

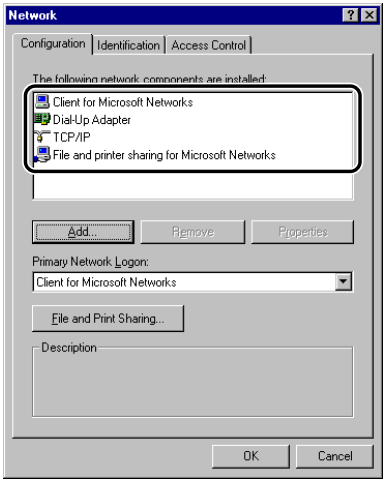
- Windows 98/Me: See "Windows 98/Me," on p. 5-11.
- Windows 2000/XP/Server 2003: See "Windows 2000/XP/Server 2003," on p. 5-12.
- Windows NT 4.0: See "Windows NT 4.0," on p. 5-13.

IMPORTANT

The following procedures describe a sample NetBIOS setup. Depending on your environment, the actual setup procedure may differ.

1 Specify the NetBIOS settings.

- ❑ Right-click the [Network Neighborhood] icon or [My Network Places] icon displayed on the screen → click [Properties].
- ❑ In [The following network components are installed], confirm that both [Client for Microsoft Networks] and [File and printer sharing for Microsoft Networks] appear. If not, click [Add] to install these components.



- ❑ Select [TCP/IP] from [The following network components are installed] → click [Properties].

  The [TCP/IP Properties] dialog box appears on the screen.
- ❑ Click the [Bindings] tab to display the [Bindings] sheet →Select [Client for Microsoft Networks].
- ❑ Click [OK].
- ❑ Restart the computer if prompted.

1 Specify the NetBIOS settings.

❑ If you are using Windows 2000, right-click the [My Network Places] icon on the screen → click [Properties].
If you are using Windows XP, on the [Start] menu, right-click [My Network Places] → click [Properties].
If you are using Windows Server 2003, on the [Start] menu, click [Control Panel] → [Network Connections].

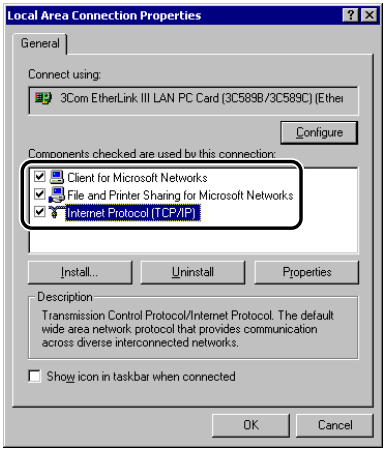
In the case of Windows 2000, the [Network and Dial-up Connections] window opens.

In the case of Windows XP, the [Network Connections] window opens.

❑ Right-click the [Local Area Connection] icon → click [Properties].

The [Local Area Connection Properties] dialog box opens.

❑ Confirm that [Client for Microsoft Networks], [File and Printer Sharing for Microsoft Networks], and [Internet Protocol (TCP/IP)] are all selected. If any of these functions are not selected, select them now.



❑ Double-click [Internet Protocol (TCP/IP)] to open the [Internet Protocol (TCP/IP) Properties] dialog box. In the [General] sheet, click [Advanced].

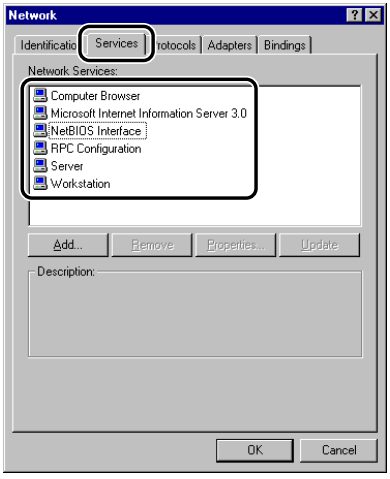
❑ Click the [WINS] tab, and then in the [WINS] sheet. Select [Enable NetBIOS over TCP/IP].

❑ Click [OK] until all the dialog boxes are closed.

❑ Restart the computer if prompted.

1 Specify the NetBIOS settings.

- ❑ Right-click the [Network Neighborhood] icon displayed on the screen → click [Properties].
- ❑ Click the [Services] tab to display the [Services] sheet. Then, confirm that [NetBIOS Interface] and [Server] appear in [Network Services]. If not, click [Add] to install them.



- ❑ Click [OK].
- ❑ Restart the computer if prompted.

Printer Connection Method

Install the driver and specify the port for the machine to use to print or send a fax. Follow the instructions below.

NOTE

If Windows NT/2000/XP/Server 2003 is on your network, the following procedure enables you to set up a print server for more efficient management of network printers. Once a print server is set up, print jobs can be managed by the print server. Also, by setting up an alternate driver for the print server, printer drivers can be installed in each computer via the network.
For instructions on how to set print servers, see the following procedures indicated in the manual for each driver:

- *If you want to use the PCL printer driver*
  See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the PCL Driver Guide.
- *If you want to use the PS printer driver*
  See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the PS Driver Guide.
- *If you want to use the UFR printer driver*
  See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the UFR Driver Guide.
- *If you want to use the fax driver*
  See the procedure for alternative printer driver installation in Chapter 2, "Getting Started," in the Fax Driver Guide.

1 Check the settings for both <RX/Print Range> and <Setting/Browsing Range> in [IP Address Range Settings] to see whether the IP address of the computer in which a driver is to be installed is permitted. (See step 21 in "TCP/IP Settings," on p. 3-4.)

IMPORTANT

- *If the settings for both <RX/Print Range> and <Setting/Browsing Range> in [IP Address Range Settings] do not permit the IP address, you cannot install a driver.*
- *If the IP address of the computer is beyond the range of the permitted addresses for <RX/Print Range> after installing a driver, you cannot print from the computer.*

2 Install the driver.

Install the driver according to the following procedures indicated in the manual for each driver:

- If you want to use the PCL printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *PCL Driver Guide*.
- If you want to use the PS printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *PS Driver Guide*.
- If you want to use the UFR printer driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *UFR Driver Guide*.
- If you want to use the fax driver
  See the procedure for standard installation in Chapter 2, "Getting Started," in the *Fax Driver Guide*.

When the dialog box for selecting the port appears during installation, click [Use Network Printer] → [Settings]. From the list, select [Workgroup], [Server], and [Printer] you set in "SMB and WINS Settings," on p. 5-4.

The port settings are complete.

Setting Up a Computer as a File Server

To send data from the machine to a computer on your network, you need to specify the settings of the computer for receiving data. You can send data over a NetBIOS network to a Windows and Samba (UNIX/Linux) shared folder. This section describes how to configure a shared folder.

IMPORTANT

- *Samba 2.2.8a or later is supported.*
- *To send data from the machine, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *This section describes only the procedures for setting up a computer receiving data sent from the machine. To send data from the machine to a server on the network, you must enter an address setting from the control panel. For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.*
- *The following procedures describe a sample shared folder configuration. Depending on your environment, the actual configuration procedure may differ.*

NOTE

You can send data over a TCP/IP network from the machine to an FTP server. For instructions on how to set up an FTP server, see "Setting Up a Computer as a File Server," in Chapter 3, "Using a TCP/IP Network." (See p. 3-53.)

Connecting to a TCP/IP Network

A computer that receives data sent from the machine must have TCP/IP client software installed and must be enabled for TCP/IP network use. For details, see the manuals provided with the operating system.

Connecting to a NetBIOS Network and Configuring a Shared Folder

Windows 95/98/Me

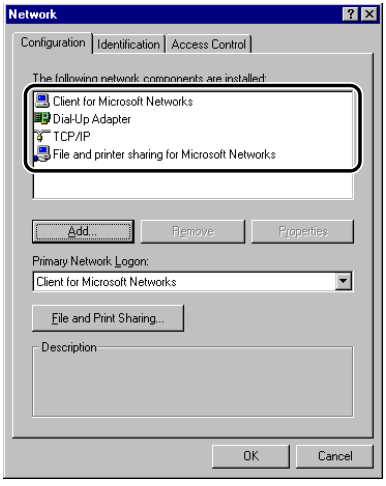
NOTE

- *If a suitable Windows NT/2000/XP/Server 2003 machine is available on your network, it is recommended that you configure that machine as a file server instead of using a Windows 98/Me machine.*
- *In the following procedures, items displayed on the screen for Windows 98 are used; items might differ depending on your operating system.*

1 Specify the NetBIOS settings.

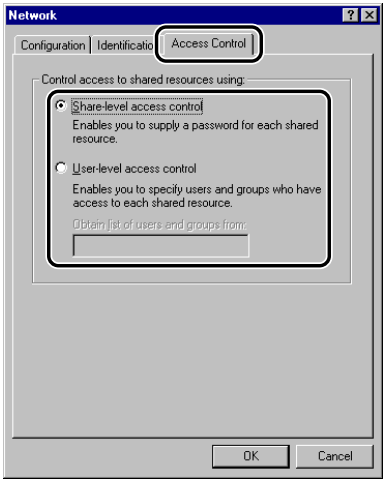
❑ Right-click the [Network Neighborhood] icon displayed on the screen → click [Properties].

❑ In [The following network components are installed], confirm that both [Client for Microsoft Networks] and [File and printer sharing for Microsoft Networks] appear. If not, click [Add] to install these components.



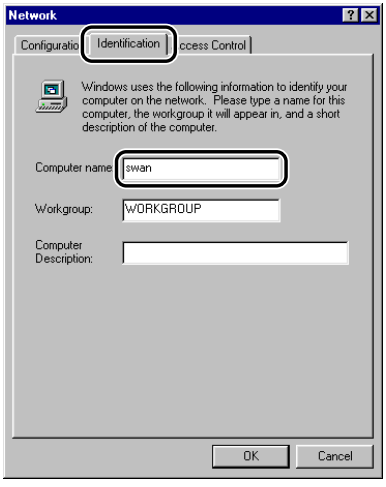
❑ Click [File and Print Sharing] → select [I want to be able to give others access to my files] → click [OK].

❑ To specify the access control method, click the [Access Control] tab → select the level of access control.


Network
Configuration
Identificatio
Access Control
Control access to shared resources using:
Share-level access control
Enables you to supply a password for each shared resource.
User-level access control
Enables you to specify users and groups who have access to each shared resource.
Obtain list of users and groups from:
OK
Cancel

If you select [User-level access control], specify a domain in which a list of users and groups is saved.

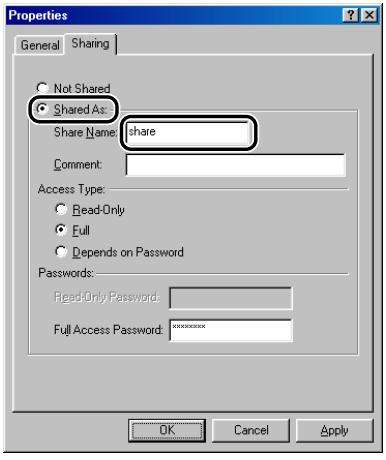
❑ In the [Network] dialog box, click the [Identification] tab to display the [Identification] sheet. Confirm the computer name.



❑ Click [OK] to close the [Network] dialog box.

2 Set up file sharing.

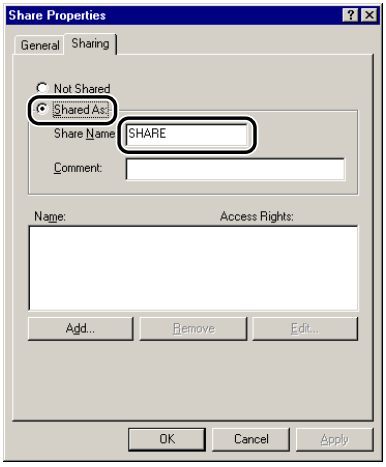
- **If [Share-level access control] is selected:**
  - ❑ Right-click the folder you want to share using Explorer → click [Sharing].
  - ❑ On the [Sharing] sheet, select [Shared As] → enter the share name in [Share Name].



  - ❑ For [Access Type], select either [Full] or [Depends on Password].
  - ❑ Enter a password.
    If [Depends on Password] is selected, enter the password for full access.
    Up to 14 alphanumeric characters can be entered for the password.
  - ❑ Confirm the settings you entered → click [OK].

- **If [User-level access control] is selected:**
  - ❑ Right-click the folder you want to share using Explorer → click [Sharing].

❑ On the [Sharing] sheet, select [Shared As] → enter the share name in [Share Name].



❑ Click [Add].

The [Add Users] dialog box appears on the screen.

❑ From the left list select the users you want to give access to the shared folder to → add them to the right list.

NOTE

For details on this dialog box, see the Windows 98/Me manual.

❑ Confirm the settings you entered → click [OK].

❑ Click [OK] to close the properties dialog box of the shared folder.

3 Set a recipient address using the control panel.

There are two methods for specifying the recipient address settings. You can select the desired values from the list displayed by pressing [Browse]. Or you can press each key to enter the desired value for each item.

Sample recipient setting:

• Server side settings:

[Computer name]: swan

[Share Name]: share

Create a folder called Images within share, and then specify Images as the recipient for sending.

- The machine's recipient settings:

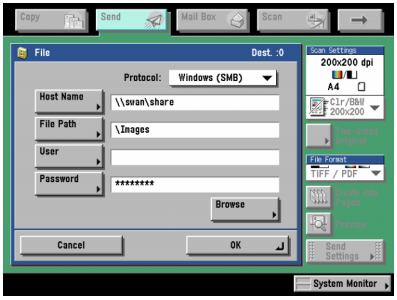
  [Protocol]: Windows (SMB)

  [Host Name]: \\swan\share

  [File Path]: \Images

  [User]: (Not required if you have selected [Share-level access control] in step 1)

  [Password]: Password entered in step 2.



IMPORTANT

- *If you use [Browse] to specify each item, press [Browse] after the expiration of the time specified in "Startup Time Settings," on p. 3-30 (the default setting startup time is '60 seconds').*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. For [User], up to 20 alphanumeric characters can be entered. Enter each of these items on the server using no more than their allowable number of characters.*
- *If you change the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly, or you may not be able to browse the directories.*
- *If the language of the touch panel display differs from the computer used as a master browser, [Host name] and [File path] may not be displayed correctly, or you may not be able to browse the directories.*

NOTE

- *You can send data using the following formats. A DNS server is required for the latter case.*
  \\192.168.2.100\share
  \\host_name.organization.company.com\share
- *You can also specify the user name in the address using the following format.*
  domain_name\user_name (up to 15 alphanumeric characters for the domain name, and up to 20 for the user name)
- *For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.*

The settings for sending data to the shared folder are complete.

Windows 2000/XP/Server 2003

IMPORTANT

It is recommended that the network manager configure the file server.

NOTE

The number of users or clients that can access a server running Windows 2000/XP/Server 2003 is limited. After this number of users or clients is reached, it is not possible to send to a server running Windows 2000 /XP/Server 2003.

1 Log on to Windows as Administrator.

2 Specify the NetBIOS settings.

❑ If you are using Windows 2000, right-click the [My Network Places] icon on the screen → click [Properties].
If you are using Windows XP, on the [Start] menu, right-click [My Network Places] → click [Properties].
If you are using Windows Server 2003, on the [Start] menu, click [Control Panel] → [Network Connections].

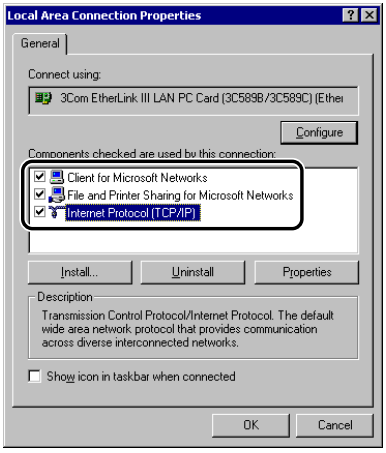
In the case of Windows 2000, the [Network and Dial-up Connections] window opens.

In the case of Windows XP, the [Network Connections] window opens.

❑ Right-click the [Local Area Connection] icon → click [Properties].

The [Local Area Connection Properties] dialog box opens.

❑ Confirm that [Client for Microsoft Networks], [File and Printer Sharing for Microsoft Networks], and [Internet Protocol (TCP/IP)] are all selected. If any of these functions is not selected, select it now.



❑ Double-click [Internet Protocol (TCP/IP)] to open the [Internet Protocol (TCP/IP) Properties] dialog box. In the [General] sheet, click [Advanced].

❑ Click the [WINS] tab, and then in the [WINS] sheet select [Enable NetBIOS over TCP/IP].

❑ Click [OK] until all the dialog boxes are closed.

❑ Restart the computer if prompted.

3 Confirm the computer name.

● **If you are using Windows 2000:**

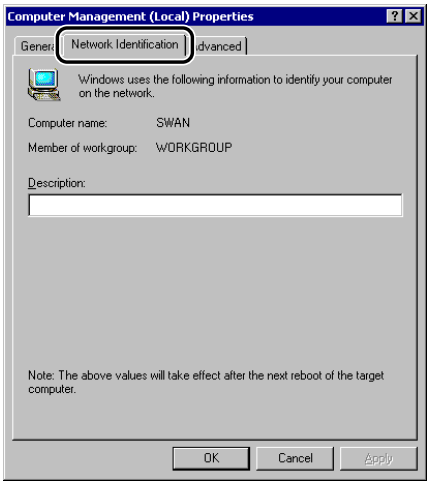
❑ Right-click the [My Computer] icon → click [Manage].

The [Computer Management] window opens.

❑ Right-click the [Computer Management (Local)] icon → click [Properties].

The [Computer Management (Local) Properties] dialog box opens.

❑ Click the [Network Identification] tab to display the [Network Identification] sheet → confirm the [Computer name] setting.



❑ Click [Cancel] to close the dialog box → close the [Computer Management] window.

● **If you are using Windows XP/Server 2003:**

❑ On the [Start] menu, right-click [My Computer] → click [Properties].

❑ Click the [Computer Name] tab to display the [Computer Name] sheet.

❑ Click [Change] → [More] in the [Computer Name Changes] dialog box.

❑ In the [DNS Suffix and NetBIOS Computer Name] dialog box, confirm [NetBIOS computer name].

❑ Click [Cancel] until all the dialog boxes are closed.

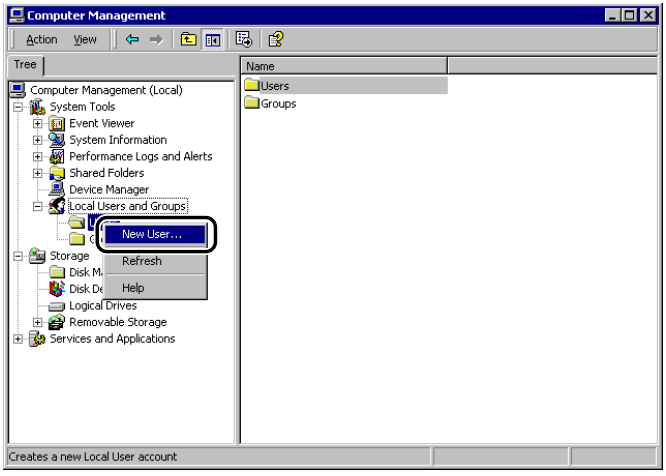
4 Set up the users and passwords for access to the shared folder.

❑ Right-click the [My Computer] icon → click [Manage].

The [Computer Management] window opens.

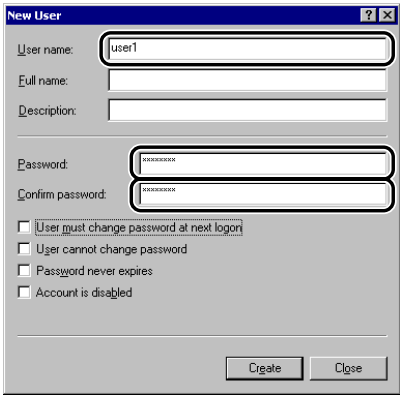
❑ Under [System Tools], double-click [Local Users and Groups] → right-click the [Users] folder → click [New User].

For Windows 2000



❑ In the [New User] dialog box, enter the user name in [User name] → enter the password in [Password] → re-enter the password in [Confirm Password].

For Windows 2000



Up to 20 alphanumeric characters can be entered for the user name, and up to 14 for the password.

If [User must change password at next logon] is selected, any new users added must change their passwords in order to send data from the machine. (You cannot change the password from the control panel.)

❑ Confirm the settings → click [Create].

❑ Close the [Computer Management] window.

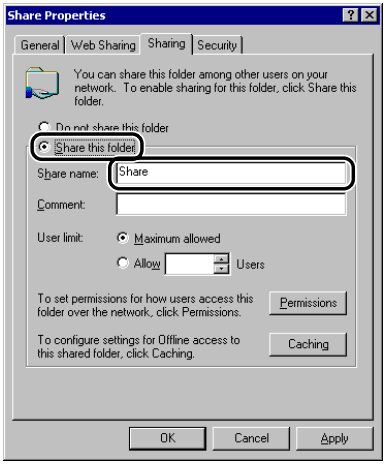
NOTE

In the Active Directory environment, the procedures for setting up users differ from the above. For details, see the Windows manual.

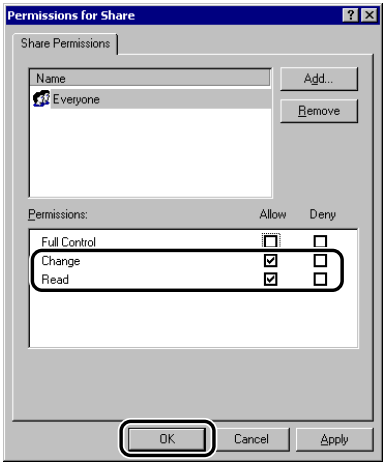
5 Configure the shared folder.

❑ Right-click the folder you want to share using [Explorer] → click [Properties].

❑ On the [Sharing] sheet, select [Share this folder] → enter the share name in [Share name].



❑ To create a shared folder on a FAT or FAT32 format disk (If the [Security] tab is undisplayed), click [Permissions]. Select or add the users or groups you want to give access to the shared folder to. Under [Permissions], select both [Change] and [Read] → click [OK].



❑ To create a shared folder on an NTFS format disk, click the [Security] tab. In the [Security] sheet, select or add the users or groups you want to give access to the shared folder to. Under [Permissions], select both [Write] and [Read & Execute], or a higher access authority. For data in the folder, check both [Write] and [Read], or a higher access authority.

❑ Click [OK] → close the properties dialog box of the shared folder.

NOTE

- *To display the [Security] tab in Windows XP, open Folder Options → deselect [Use simple file sharing]. However, you can share folders and files with [Use simple file sharing] selected. Select or deselect [Use simple file sharing] to suit your environment. For details about the settings, see the manual provided with Windows XP.*
- *In the Active Directory environment, the procedures for specifying the security settings of the shared folder differ from the above. For details, see the Windows manual.*

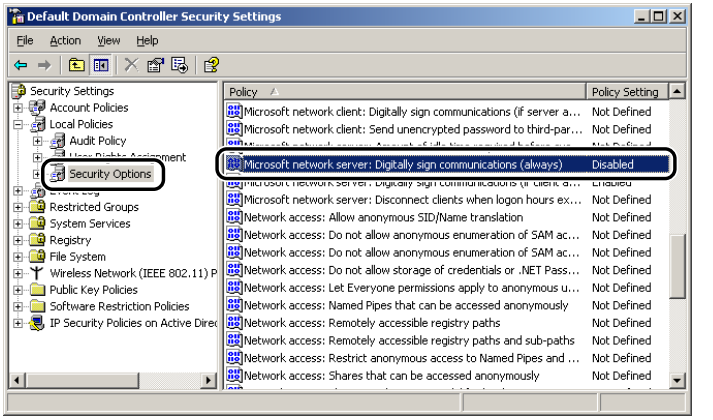
6 If you are using the Windows Server 2003 Active Directory environment, specify the following settings.

❑ Click the [Start] menu → point to [Administrative Tools] → click [Domain Controller Security Policy].

The [Domain Controller Security Settings] window appears.

❑ In the left window, double-click [Security Settings] → [Local Policies] → click [Security Options].

❑ In the right window, select [Microsoft network server: Digitally sign communications (always)] → set to [Disabled].


Default Domain Controller Security Settings
File Action View Help
Security Settings
Account Policies
Local Policies
Audit Policy
Security Options
Restricted Groups
System Services
Registry
File System
Wireless Network (IEEE 802.11) P
Public Key Policies
Software Restriction Policies
IP Security Policies on Active Direc
Policy
Policy Setting
Microsoft network client: Digitally sign communications (if server a... Not Defined
Microsoft network client: Send unencrypted password to third-par... Not Defined
Microsoft network server: Digitally sign communications (always) Disabled
Microsoft network server: Disconnect clients when logon hours ex... Not Defined
Network access: Allow anonymous SID/Name translation Not Defined
Network access: Do not allow anonymous enumeration of SAM ac... Not Defined
Network access: Do not allow anonymous enumeration of SAM ac... Not Defined
Network access: Do not allow storage of credentials or .NET Pass... Not Defined
Network access: Let Everyone permissions apply to anonymous u... Not Defined
Network access: Named Pipes that can be accessed anonymously Not Defined
Network access: Remotely accessible registry paths Not Defined
Network access: Remotely accessible registry paths and sub-paths Not Defined
Network access: Restrict anonymous access to Named Pipes and ... Not Defined
Network access: Shares that can be accessed anonymously Not Defined

❑ Close the [Domain Controller Security Settings] window.

NOTE

To browse the directories and send data in the Windows Server 2003 Active Directory environment, you must first specify this setting.

7 Set a recipient address using the control panel.

There are two methods for specifying the recipient address settings. You can select the desired values from the list displayed by pressing [Browse]. Or you can press each button to enter the desired value for each item.

Sample recipient setting:

• Server side settings:

[Computer name]: swan

[Share Name]: share

Create a folder called Images within share, and then specify Images as the recipient for sending.

- The machine's Recipient Settings:

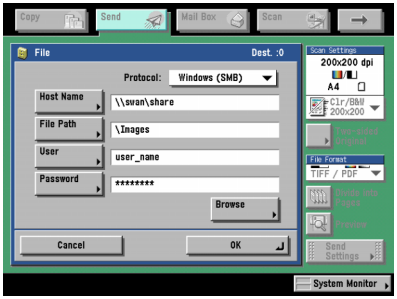
  [Protocol]: Windows (SMB)

  [Host Name]: \\swan\share

  [File Path]: \Images

  [User]: User name entered in step 4.

  [Password]: Password for the above user.



IMPORTANT

- *If you use [Browse] to specify each item, press [Browse] after the expiration of the time specified in "Startup Time Settings," on p. 3-30 (the default setting startup time is '60 seconds').*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. Enter each of these items on the server using no more than their allowable number of characters.*
- *If you change the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly, or you may not be able to browse the directories.*
- *If the language of the touch panel display differs from the computer used as a master browser, [Host name] and [File path] may not be displayed correctly, or you may not be able to browse the directories.*
- *If you send data in the Windows 2000/XP/Server 2003 Active Directory environment, specify the actual directory path when setting the recipient address. While sending, the Active Directory cannot be browsed and the tree path cannot be specified.*

NOTE

- *You can send data using the following formats. A DNS server is required for the latter case.*
  \\192.168.2.100\share
  \\host_name.organization.company.com\share
- *You can also specify the user name in the address using the following formats.*
  - *domain_name\user_name (up to 15 alphanumeric characters for the domain name, and up to 20 for the user name)*
  - *user_name@organization.company.com (up to 128 characters in total)*
    Note that the latter is only applicable when sending to a Windows 2000/XP/Server 2003 computer that belongs to a domain containing Windows 2000/Server 2003 domain controllers.
- *For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.*

The settings for sending data to the shared folder are complete.

Windows NT 4.0

IMPORTANT

It is recommended that the network manager configure Windows NT Server 4.0.

NOTE

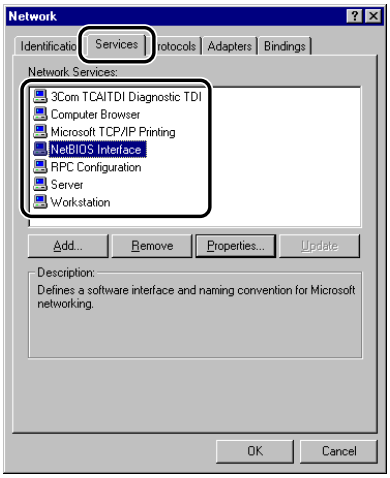
Windows NT Server 4.0 can be accessed by a limited number of users or clients. Once this limit is reached, it is not possible to send to Windows NT Server 4.0.

1 Log on to Windows NT Server 4.0 as any of the following: Administrators, or Server Operators.

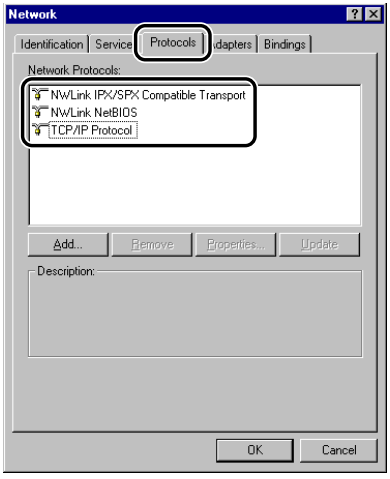
2 Specify the NetBIOS settings.

❑ Right-click the [Network Neighborhood] icon displayed on the screen → click [Properties].

❑ Click the [Services] tab to display the [Services] sheet → confirm that [NetBIOS Interface] and [Server] appear in [Network Services]. If not, click [Add] to install them.



❑ Click the [Protocols] tab to display the [Protocols] sheet → confirm that [TCP/IP Protocol] appears in [Network Protocols]. If not, click [Add] to install it.

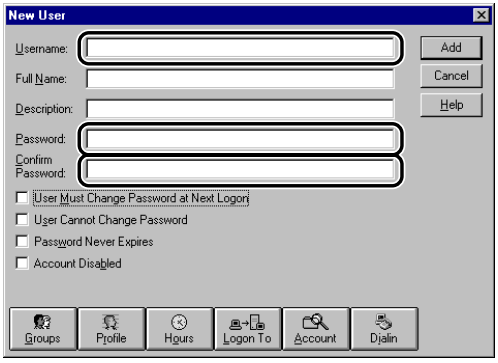


❑ Click the [Identification] tab to display the [Identification] sheet → confirm the computer name.

❑ Click [OK] to close the dialog box.

3 Set the users and passwords for access to the shared folder.

- ❑ On the [Start] menu, point to [Programs] → point to [Administrative Tools] → click [User Manager for Domains] to start the User Manager.
- ❑ On the [User] menu, click [New User].
- ❑ Enter the user name in [Username] → enter the password in [Password] → re-enter the password in [Confirm Password] → enter additional information if necessary.



Up to 20 alphanumeric characters can be entered for the user name, and up to 14 for the password.

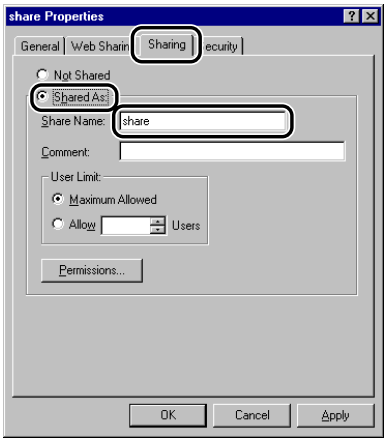
If [User Must Change Password at Next Logon] is selected, any new users added must change their password in order to send data from the machine. (You cannot change the password from the control panel.)

- ❑ Confirm the settings → click [Add].
- ❑ Exit the User Manager.

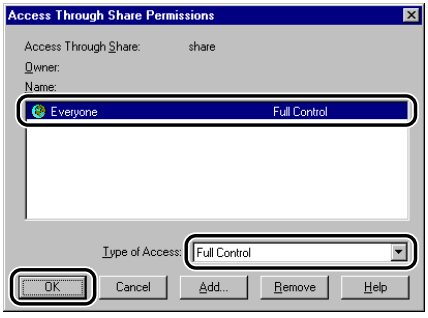
4 Set up file sharing.

- ❑ Right-click the folder you want to share using Explorer → click [Sharing].

❑ Click the [Sharing] tab to display the [Sharing] sheet. Select [Shared As] → enter the share name in [Share Name].



❑ To create a shared folder on a FAT or FAT32 format disk (If the [Security] tab is undisplayed), click [Permissions] to open the [Access Through Share Permissions] dialog box. Select or add the users or groups you want to give access to the shared folder to → select either [Change] or [Full Control] from [Type of Access] → click [OK].



❑ To create a shared folder on an NTFS format disk, click the [Security] tab. In the [Security] sheet, click [Permission] to open the [Directory Permission] dialog box. Select or add the users or groups you want to give access to the shared folder to. For each user or group, select [Add] or [Read] access from [Type of Access]. Also select [Add] or [Read] access for each folder in the file.

❑ Click [OK] → close the properties dialog box of the shared folder.

5 Set a recipient address using the control panel.

There are two methods for specifying the recipient address settings. You can select the desired values from the list displayed by pressing [Browse]. Or you can press each button to enter the desired value for each item.

For sample settings, see the example of Windows 2000/XP/Server 2003 address settings (see p. 5-12).

IMPORTANT

- *If you use [Browse] to specify each item, press [Browse] after the expiration of the time specified in "Startup Time Settings," on p. 3-30 (the default setting startup time is '60 seconds').*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. Enter each of these items on the server using no more than their allowable number of characters.*
- *If you change the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly, or you may not be able to browse the directories.*
- *If the language of the touch panel display differs from the computer used as a master browser, [Host name] and [File path] may not be displayed correctly, or you may not be able to browse the directories.*

NOTE

- *You can send data using the following formats. A DNS server is required for the latter case.*
  \\192.168.2.100\share
  \\host_name.organization.company.com\share
- *You can also specify the user name in the address using the following format.*
  domain_name\user_name (up to 15 alphanumeric characters for the domain name, and up to 20 for the user name)
- *For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.*

The settings for sending data to the shared folder are complete.

Samba (UNIX/Linux)

IMPORTANT

- *Samba 2.2.8a or later is supported.*
- *In some environments, detailed settings may be required in order to use Samba. For details, consult your network manager.*

1 Log in to a workstation as a superuser.

2 Set up the users who access Samba shared folder, and their passwords.

Set a user name not longer than 20 alphanumeric characters, and a password not longer than 14 alphanumeric characters.

3 Set a recipient address using the control panel.

There are two methods for specifying the recipient address settings. You can select the desired values from the list displayed by pressing [Browse]. Or you can press each key to enter the desired value for each item.

Sample recipient setting:

- Server side settings:

[Computer name]: swan

[Share Name]: share

Create a folder called Images within share, and then specify Images as the recipient for sending.

- The machine's recipient settings:

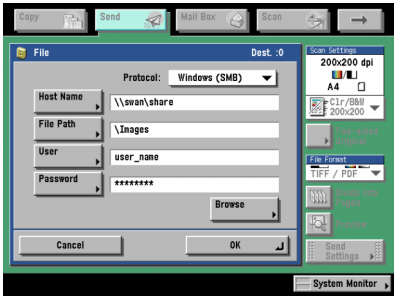
  [Protocol]: Windows (SMB)

  [Host Name]: \\swan\share

  [File Path]: \Images

  [User]: User name entered in step 4.

  [Password]: Password for the above user.



IMPORTANT

- *If you use [Browse] to specify each item, press [Browse] after the expiration of the time specified in "Startup Time Settings," on p. 3-30 (the default setting startup time is '60 seconds').*
- *Up to 128 alphanumeric characters can be entered for both [Host Name] and [File Path] on the control panel. For [User], up to 20 alphanumeric characters can be entered. Enter each of these items on the server using no more than their allowable number of characters.*
- *If you change the language of the touch panel display, [Host Name] and [File Path] may not be displayed correctly, or you may not be able to browse the directories.*
- *If the language of the touch panel display differs from the computer used as a master browser, [Host name] and [File path] may not be displayed correctly, or you may not be able to browse the directories.*

NOTE

- *You can send data using the following formats. A DNS server is required for the latter case.*
  \\192.168.2.100\share
  \\host_name.organization.company.com\share
- *You can also specify the user name in the address using the following format.*
  - *domain_name\user_name (up to 15 alphanumeric characters for the domain name, and up to 20 for the user name)*
  - *user_name@organization.company.com (up to 128 characters in total)*
    Note that the latter is only applicable when sending to a Windows 2000/XP/Server 2003 computer that belongs to a domain containing Windows 2000/Server 2003 domain controllers.
- *For instructions on how to specify recipient address settings, see Chapter 2, "Basic Sending Methods," in the Sending and Facsimile Guide.*

The settings for sending data to the shared folder are complete.

Using an AppleTalk Network (Macintosh)

6
CHAPTER

This chapter describes settings and procedures for printing via an AppleTalk network.

AppleTalk Network Setup Procedures 6-2
Macintosh Network Settings 6-3
Protocol Settings 6-4
Settings from the Control Panel 6-5
Setting Up a Computer for Printing 6-8

AppleTalk Network Setup Procedures

To print via an AppleTalk network, it is necessary to perform the following procedures.

1 Macintosh Network Settings (See "Macintosh Network Settings," on p. 6-3.)

Set up the Macintosh for connection to an Ethernet network.

2 Protocol Settings (See "Settings from the Control Panel," on p. 6-5.)

Specify the protocol settings. To specify the settings, use:

- The machine's control panel
- A web browser (Remote UI)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

3 Macintosh Print Settings (See "Setting Up a Computer for Printing," on p. 6-8.)

Specify the settings for each computer you use for printing.

IMPORTANT

- *If you are using the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit.*
- *To print from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *It is not possible to send a fax from a computer via an AppleTalk network.*
- *It is recommended that the network manager perform step 2 above.*
- *To configure settings with software other than the control panel of the machine, TCP/IP protocol must be supported by your network environment.*

Macintosh Network Settings

Verify the Macintosh network settings.

1 Check that [AppleTalk] is active.

- ❑ Click [Chooser] on the [Apple] menu.
- ❑ Check that [Active] is selected under [AppleTalk]. If [Inactive] is selected, select [Active].

2 Check that the AppleTalk connection method is [Ethernet].

- ❑ On the [Apple] menu, point to the control panels → click [AppleTalk].
- ❑ Set the selection to [Ethernet].
- ❑ Close the [AppleTalk] dialog to save the setting.

NOTE

In an environment connecting to Ethernet through LocalTalk, select [Printer Port].

The Macintosh network settings are complete.

Protocol Settings

You can specify the protocol settings for the machine by using any of the following:

- The machine's control panel
- A web browser (Remote UI)
- NetSpot Device Installer (Canon utility)
- A web browser (NetSpot Console) (Canon utility)

IMPORTANT

- *To print from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.*
- *To configure settings with software other than the control panel of the machine, TCP/IP protocol must be supported by your network environment.*
- *Some items cannot be set using NetSpot Device Installer or NetSpot Console. For details about items that can be set with NetSpot Device Installer or NetSpot Console, see "Network Setting Items," on p. 9-2.*
- *The following procedure describes sample settings using the control panel.*

NOTE

- *For instructions on how to enter settings using a web browser (Remote UI), see Chapter 3, "Customizing Settings," in the Remote UI Guide.*
- *For more information on NetSpot Device Installer or NetSpot Console, see Chapter 7, "Using the Network and Device Settings with Utilities."*

Settings from the Control Panel

The procedure for specifying the settings from the control panel is as follows.

IMPORTANT

- *AppleTalk is available only on Ethernet. You cannot use AppleTalk on Token Ring. If the Token Ring board is installed on the machine, you cannot use AppleTalk. Remove the Token Ring board if it is installed on the machine.*
- *Settings from the control panel become effective when the machine is restarted after the procedure.*

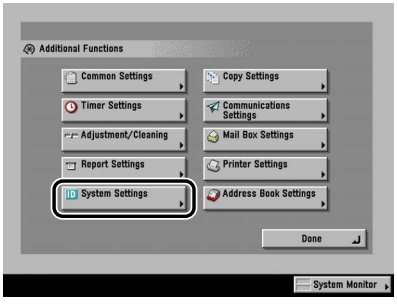
NOTE

For instructions on how to enter characters using the touch panel display, see Chapter 2, "Basic Operations," in the Reference Guide.

---

1 **Press ⊛.**

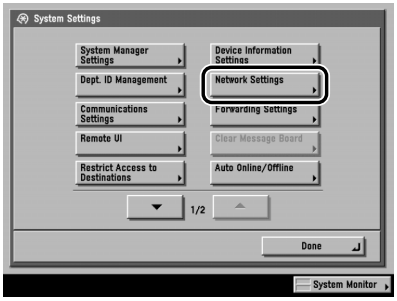
2 **Press [System Settings].**



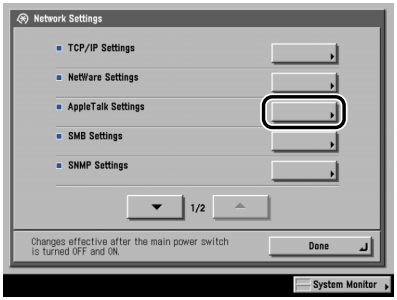
NOTE

If the message <Enter the System Manager ID and Password using the numeric keys.> appears on the touch panel display, enter the System Manager ID and password. For instructions on how to enter the System Manager ID and password, see Chapter 2, "Basic Operations," in the Reference Guide.

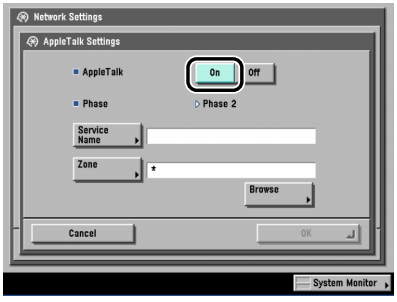
3 Press [Network Settings].



4 Press [AppleTalk Settings].



5 Select [On] for <AppleTalk>.



Selecting [Off] disables AppleTalk.

6 Press [Service Name] → enter the name of the printer.

The name you enter here appears in the Macintosh Chooser.

IMPORTANT

- *The name of the printer can have up to 32 characters.*
- *If there is more than one printer in the same zone, each printer must have a unique name.*

7 Press [Zone] → enter a zone name.

If you are using a network that is set up in zones, enter the name of the zone.

You can also enter a zone name by pressing [Browse] and selecting the appropriate name from the displayed list.

8 Confirm the settings you specified → press [OK].

9 Press [Done] repeatedly until the Additional Functions screen closes.

10 Restart the machine.

❑ Turn OFF the machine, wait at least 10 seconds, and then turn it ON again.

NOTE

For instructions on how to turn ON/OFF the machine, see Chapter 1, "Before You Start Using This Machine," in the Reference Guide.

The protocol settings are complete.

Setting Up a Computer for Printing

After you have completed the machine protocol settings, install the printer driver on the Macintosh that will do the printing, and then make the settings for the print destination.

See the *Network Quick Start Guide* to install the printer driver and to set the port.

IMPORTANT

To print from a computer, the optional equipment must be installed. For the equipment needed, see "Optional Equipment and System Environment Requirements," on p. 1-2.

NOTE

Select either one of the following names displayed in the Chooser. ('xxx' indicates the name of the printer entered in [Service Name].)

- *[xxx_D]: the print job is printed without spooling to the hard disk of the machine.*
- *[xxx_S]: the print job is printed after it has been spooled to the hard disk of the machine.*

Using the Network and Device Settings with Utilities

7
CHAPTER

This chapter describes the utilities used for managing networks and printers.

NetSpot Device Installer 7-2
NetSpot Console 7-3

NetSpot Device Installer

NetSpot Device Installer is a utility for specifying the initial settings of Canon devices connected to a network. Available on the CD-ROM, NetSpot Device Installer can be accessed directly without installation, enabling network users to quickly and easily specify the initial settings of network devices.

For the system requirements for NetSpot Device Installer and instructions on how to install the software, see the Readme file for NetSpot Device Installer. For instructions on how to display the Readme file, see the *Network Quick Start Guide*.

NetSpot Console

NetSpot Console is a utility capable of managing devices connected to a network. This software enables network administrators to set or view various types of information about network devices using a web browser, such as list or map display of devices, detailed protocol settings, display and notification of device status, and job manipulations.

For the system requirements for NetSpot Console and instructions on how to install the software, see the *NetSpot Console User's Guide* or Readme file. For instructions on how to display the NetSpot Console User's Guide or Readme file, see the *Network Quick Start Guide*.

8 CHAPTER

Troubleshooting

This chapter describes how to resolve printing problems.

Network Connection Problems and Remedies 8-2
Printing Problems and Remedies 8-4
Data Sending/File Sharing Problems and Remedies 8-9

Network Connection Problems and Remedies

This section describes the causes of network connection problems, and how to resolve them.

<Check the network connection.> is displayed on the control panel.

Cause The machine and cable are not properly connected.

Remedy Turn OFF the machine's power switches, check that the machine is connected to the network using the proper cable, and then turn them to ON again. (See "Connecting the Machine to a Computer or Network," on p. 2-3.)

The machine automatically connects to other than the intended destination via its dial-up access (when a dial-up router is connected to your network).

Cause The machine periodically or temporarily communicates with devices on your network. If a dial-up router or NetWare file server is on the network to which the machine is connected, the machine connects to other than the intended destination, depending on the settings of the machine or dial-up router (including the following examples); this may result in subscriber line charges and call charges.
Examples:

- The file or mail server's host name or IP address set on the machine does not exist on the network.
- The DNS server exists on an external network.
- You attempt to access a device connected to an external network, if the device's information is set on the DNS server on the network to which the machine is connected.

Remedy Check the following:

- If the dial-up router does not have to send packets via broadcast, change the router settings to ensure that it sends packets via a method other than broadcast. If dial-up router has to send packets via broadcast, check that the settings are correct.
- Check that the file or mail server's host name or IP address set on the machine is correct.
- If you attempt to access a device on the network to which the machine is connected with the DNS server on an external network, set the destination using an IP address, not a host name.

- If information about a device on an external network is set on the DNS server on the network to which the machine is connected, check the settings.

Detailed information concerning the machine cannot be set or browsed using a web browser (Remote UI), or utility.

Cause 1	The IP addresses of computers on which a web browser (Remote UI) or utility is used are not allowed in <Setting/Browsing Range> in [IP Address Range Settings].
Remedy	If the settings for <Setting/Browsing Range> in [IP Address Range Settings] do not permit the IP address of a computer on which a web browser (Remote UI) or utility is used, you cannot set the machine setting items or browse information on the machine. Check the settings for <Setting/Browsing Range> in [IP Address Range Settings]. (See step 21 in "TCP/IP Settings," on p. 3-4.)
Cause 2	[Use SNMP] or [Enable Dedicated Port Settings] is set to [Off].
Remedy	Set [Use SNMP] and [Enable Dedicated Port Settings] to [On]. (See "Communication Environment Setup," on p. 2-17.)
Cause 3	The SNMP community name does not match.
Remedy	If you use an SNMP community name different from that stored in the machine to access the machine from a utility, the utility will not detect the machine. In this case, check the SNMP community name. (See "Communication Environment Setup," on p. 2-17.)

Printing Problems and Remedies

This section describes how to resolve basic printing problems.

Unable to Install a Driver (TCP/IP Network)

Cause The IP address of the computer in which a driver is to be installed is not permitted by the settings for <RX/Print Range> in [IP Address Range Settings].

Remedy If you want to use IPP for printing and the IP address of the computer in which a driver is to be installed is not permitted by the settings for <RX/Print Range> in [IP Address Range Settings], the driver cannot be installed successfully. Check the settings for <RX/Print Range> in [IP Address Range Settings]. (See step 21 in "TCP/IP Settings," on p. 3-4.)

Unable to Install a Driver (NetBIOS Network)

Cause The IP address of the computer in which a driver is to be installed is not permitted by the settings for both <RX/Print Range> and <Setting/Browsing Range> in [IP Address Range Settings].

Remedy If you are using a NetBIOS network and the IP address of the computer in which a driver is to be installed is not permitted by the settings for both <RX/Print Range> and <Setting/Browsing Range> in [IP Address Range Settings], the driver cannot be installed successfully. Check the settings for both <RX/Print Range> and <Setting/Browsing Range> in [IP Address Range Settings]. (See step 21 in "TCP/IP Settings," on p. 3-4.)

Unable to Print from a TCP/IP Network

Cause 1 The machine and cable are not properly connected.

Remedy Turn OFF the machine's power switches, check that the machine is connected to the network using the proper cable, and then turn them to ON again. (See "Connecting the Machine to a Computer or Network," on p. 2-3.)

Cause 2	TCP/IP network is not properly set up.
Remedy	Confirm that the IP addresses are properly set up. If the IP addresses were set using DHCP, BOOTP, or RARP, confirm that they are operating.

NOTE

Your computer may not be able to recognize the machine even though the IP address settings are appropriate. This problem may be resolved by delaying the startup of network communications for the machine. (See "Startup Time Settings," on p. 3-30.)

Cause 3	The computer that is printing is not properly set up.
Remedy	Check the following: • Confirm that the proper printer driver is installed. If you are printing from Windows, each computer must have a printer driver installed. For instructions on how to install printer drivers, see the *Driver Guide*. • Confirm that the correct printer is set as the output destination for the computer that is printing. Check the output destination in [Printer] in [Control Panel]. • If you are using LPD with Windows 98/Me, follow the procedures below to confirm the spool settings: On the [Start] menu, point to [Settings] → click [Printers]. Right-click the printer icon you are using → on the pop-up menu, click [Properties]. Click the [Details] tab to display the [Details] sheet. Click [Spool Settings] to open the [Spool Settings] dialog box. Confirm that [Spool print jobs so program finishes printing faster] is selected. If it is not selected, select it → click [OK].
Cause 4	The name of the file being printed is too long.
Remedy	Normally LPR sends jobs either under the name of the application software used for printing or under the file name. However, a job name longer than 255 characters cannot be sent to the printer. To correct this problem, rename the file with a shorter name.
Cause 5	The IP address of the computer from which data (print/fax/I-fax job) is to be sent to the machine is not permitted by the settings for <RX/Print Range> in [IP Address Range Settings].
Remedy	Check the settings for <RX/Print Range> in [IP Address Range Settings]. (See step 21 in "TCP/IP Settings," on p. 3-4.)

Cause 1 The machine and cable are not properly connected.

Remedy Turn OFF the machine's power switches, check that the machine is connected to the network using the proper cable, and then turn them to ON again. (See "Connecting the Machine to a Computer or Network," on p. 2-3.)

Cause 2 The NetWare network is not properly set up.

Remedy Check the following:

- Confirm that the NetWare file server is running.
- Confirm that there is sufficient disk space on the NetWare file server. Large files cannot be printed if there is insufficient disk space.
- Start NWADMIN or PCONSOLE, and then confirm that the print queue is set up properly and is active.
- Confirm that the network settings of the machine are correctly set. (See "Protocol Settings," on p. 3-3.) Check the following in particular:
  - A valid frame type is selected from [Frame Type].
  - [Print Server] and [Printer Number] are correctly specified.

NOTE

Your computer may not be able to recognize the machine even though the IP address settings are appropriate. This problem may be resolved by delaying the startup of network communications for the machine. (See "Startup Time Settings," on p. 3-30.)

Cause 3 The computer that is printing is not properly set up.

Remedy Check the following:

- Confirm that the proper printer driver is installed. If you are printing from Windows, each computer must have a printer driver installed.
- For instructions on how to install printer drivers, see the *Driver Guide*.
- Confirm that the correct printer is set as the output destination for the computer that is printing. In Windows 98/Me, confirm the output destination in [Printer] in [Control Panel].

Cause 4 If you are using an NDS PServer or Bindery PServer and the print server has a password setting, the machine's password setting is incorrect.

Remedy Perform the following steps to correct the machine's password setting:

- Confirm the password in the NetWare print server for printing on the machine.
- Press (Menu) → [System Settings] → [Network Settings] → [NetWare Settings] to open the NetWare Settings screen.
- Press [Settings] → enter a valid password in [Print Server Password]. (The setting becomes effective when the machine is restarted.)

Cause 1	The machine and cable are not properly connected.
Remedy	Turn OFF the machine's power switches, check that the machine is connected to the network using the proper cable, and then turn them to ON again. (See "Connecting the Machine to a Computer or Network," on p. 2-3.)
Cause 2	TCP/IP network is not properly set up.
Remedy	On the assumption that the TCP/IP is working correctly if you print using NetBIOS network, check the following: • Confirm that the IP addresses are properly set up. If the IP addresses were set using DHCP, BOOTP, or RARP, confirm that they are operating. • If you are using a DHCP server, confirm that the WINS server is working correctly with the DHCP server.

NOTE

Your computer may not be able to recognize the machine even though the IP address settings are appropriate. This problem may be resolved by delaying the startup of network communications for the machine. (See "Startup Time Settings," on p. 3-30.)

Cause 3	NetBIOS network is not properly set up.
Remedy	Confirm that SMB and WINS are properly set up.
Cause 4	The IP address of the computer from which data (print/fax/I-fax job) is to be sent to the machine is not permitted by the settings for <RX/Print Range> in [IP Address Range Settings].
Remedy	Check the settings for <RX/Print Range> in [IP Address Range Settings]. (See step 21 in "TCP/IP Settings," on p. 3-4.)
Cause 5	The computer that is printing is not properly set up.
Remedy	Check the following: • Confirm that the proper printer driver is installed. If you are printing from Windows, each computer must have a printer driver installed. • For instructions on how to install printer drivers, see the *Driver Guide*. • Confirm that the correct printer is set as the output destination for the computer that is printing. In Windows 98/Me, confirm the output destination in [Printer] in [Control Panel].

Cause 1 The machine and cable are not properly connected.

Remedy Turn OFF the machine's power switches, check that the machine is connected to the network using the proper cable, and then turn them to ON again. (See "Connecting the Machine to a Computer or Network," on p. 2-3.)

Cause 2 The AppleTalk network is not properly set up.

Remedy Confirm the AppleTalk settings. (See "Settings from the Control Panel," on p. 6-5.)
In particular, check the following:
Set the [Phase] to a valid phase type.
Set the [Zone] to the zone to which the printer belongs.

NOTE

Your computer may not be able to recognize the machine even though the IP address settings are appropriate. This problem may be resolved by delaying the startup of network communications for the machine. (See "Startup Time Settings," on p. 3-30.)

Cause 3 The computer that is printing is not properly set up.

Remedy Check the following:

- In the Chooser, confirm that the proper printer driver is installed.
- In the Chooser, confirm that the proper printer has been selected as the destination.
- In the Chooser, confirm that [AppleTalk] is active.
- In [Network Control Panel] or [AppleTalk Control Panel], confirm that the AppleTalk connection method is EtherTalk or Ethernet.

Data Sending/File Sharing Problems and Remedies

The following describes how to resolve data sending/file sharing problems.

Unable to Send Data/Share Files (FTP)

Cause 1 The FTP server is not set correctly.

Remedy Perform the following to check the server status. (If you are using Windows, perform these from the MS-DOS prompt.)

- Example using UNIX, where the FTP server has the IP address: 192.168.1.195

```
U:>ftp 192.168.1.195          *Connect to server
Connected to 192.168.37.195.
220 canmfs FTP server (UNIX(r) System V Release 4.0) ready.
User (192.168.37.195:(none)): user_name          *User login
331 Password required for user_name.
Password:          *Enter password
230 User user_name logged in.
ftp> cd /export/share          *Move to data destination directory
250 CWD command successful.
ftp> bin          *Set data transfer type (binary)
200 Type set to I.
ftp> put sample.tif          *Set transfer file name for verification
ftp> by          *Cut off server connection
221 Goodbye
```

NOTE

If the above are confirmed and file sharing still does not operate normally, consult the network administrator for the environment you are using.

Cause 2 The machine's address [User] setting contains one or more spaces after the user name.

Remedy Ensure that the machine's address [User] setting does not contain spaces after the user name.

Cause 3	The machine was turned to OFF while sending data to the FTP server, and when the machine was turned back to ON, it attempted to resend the data. (If a Windows NT/2000/XP/Server 2003 FTP server is being used.)
Remedy	If power to the machine is turned to OFF while data is being sent to the FTP server, the FTP server may hold the data in a writing-in-progress state. Therefore, this data cannot be overwritten even when the machine reconnects and sends the same data again. Stop the FTP server temporarily and delete the data that has not finished sending, so it can be sent again.

Unable to Send Data/Share Files (NetWare)

Cause 1	File sharing settings for the NetWare file server are incorrect. (In Bindery Mode.)
Remedy	Check the following settings: • Use your computer to log in to NetWare file server. From Windows Explorer, double-click [Entire Network] → check that the NetWare server you want to share is listed there. You can also check for the NetWare server as follows: On the [Start] menu, point to [Find] → click [Computer] → enter the name of the server you want to share → check that the server is on the network. (This server name will be [Host Name] entered when you set up the recipient settings.) • Open the server → open the folder for file sharing. (The path to this folder will be [File Path] entered when you set up the recipient settings.) • Check that files can be written to this folder.

NOTE

If data cannot be sent or file sharing will not work after you do the above, consult your network manager.

Cause 2	File sharing settings for the NetWare file server are incorrect. (In NDS Mode.)
Remedy	Check the following settings: • Log in as a user with Admin (or equivalent authority). From Windows Explorer, double-click [Entire Network] → check that the NetWare server you want to share is listed there. You can also check for the NetWare server as follows: On the [Start] menu, point to [Find] → click [Computer] → enter the name of the server you want to share → check that the server is on the network. • Start the NWADMIN for this server. If [Root] is displayed at the upper left corner of the screen, the layer below it is the context. If [Root] is not displayed, go to the [View] menu → select [Go Up a Level] to change to the display below [Root]. (This context will be the value entered to the right side of the expression "o=" when you set up [Host Name] of the recipient.)

- With <Root> appearing on the screen, go to the [View] menu → select [Go Up a Level] to open the [Set Context] dialog box. The tree name will be displayed in [Tree]. (This tree name will be the value entered to the right side of the expression ".TREE=" when you set up [Host Name] of the recipient.)

NOTE

If data cannot be sent or file sharing will not work after you do the above, consult your network manager.

Cause 3	There is a print job in the printing queue, and the machine is still receiving this job.
Remedy	Send the data after the print job has been completely received. The machine cannot send data while it is receiving a print job.

Unable to Send Data/Share Files (Windows and Samba File Sharing)

Cause	File sharing settings for the shared folder are incorrect.
Remedy	Check the following settings: • On the computer you are using, go into Windows Explorer → double-click [Entire Network] → check that the computer you want to share is listed there. You can also check for the computer as follows: On the [Start] menu, point to [Find] → click [Computer] → enter the name of the computer you want to share → check that the computer is on the network. • If the computer you want to share is listed, double-click its icon to see whether the shared name of the folder you want to share is listed. • If the shared name does not appear, see "Setting Up a Computer as a File Server," on p. 3-53, and then check the shared folder settings.

Appendix

CHAPTER 9

This chapter includes network settings, specifications, and index.

Network Setting Items 9-2
Available Software for Network Settings 9-11
Confirming Settings. 9-12
Viewing the Network Access Log 9-13
Specifications 9-14
Ethernet Interface Adaptor 9-14
Token Ring Network Interface Adaptor 9-15
Index 9-16

Network Setting Items

With the control panel of the machine, a web browser (Remote UI), NetSpot Device Installer, or NetSpot Console, you can change the settings of the machine.

The items you can change are shown below.

IMPORTANT

If you are using the optional Color Network Printer Unit, see the manual provided with the optional Color Network Printer Unit for more information on the settings (other than for e-mail/I-fax settings).

NOTE

- *Use the control panel of the device or a web browser (Remote UI) to set items which cannot be set using NetSpot Device Installer or NetSpot Console.*
- *In the following, "N/A" stands for "Not Applicable".*

■ TCP/IP Settings

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
IP Address Settings				
IP Address	IP address	0.0.0.0	✓	✓
Subnet Mask	IP address	0.0.0.0	✓	✓
Gateway Address	IP address	0.0.0.0	✓	✓
DHCP	On/Off	Off	✓	✓
RARP	On/Off	Off	✓	✓
BOOTP	On/Off	Off	✓	✓
DNS Server Settings				
Primary Server (DNS)	IP Address	0.0.0.0	N/A	✓
Secondary Server (DNS)	IP Address	0.0.0.0	N/A	✓
Host Name	47 Characters maximum	CANON****** ("******" represents the last six digits of a MAC address)	N/A	✓
Domain Name	47 Characters maximum	(NULL)	N/A	✓

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
DNS Dynamic Update	On/Off	Off	N/A	✓
PING Command				
PING Command	IP Address	0.0.0.0	N/A	N/A
WINS Configuration				
WINS Resolution	On/Off	Off	N/A	✓
WINS Server	IP Address	0.0.0.0	N/A	✓
Scope ID	63 Characters maximum	(NULL)	N/A	✓
Node Type	Auto Set, display only	-	-	-
LPD Settings*1				
LPD Settings	On/Off	On	N/A	N/A
LPD Banner Page	On/Off	Off	N/A	✓
RAW Settings*1				
RAW Settings	On/Off	On	N/A	N/A
Use Bidirectional	On/Off	Off	N/A	N/A
SNTP Settings				
Use SNTP	On/Off	Off	N/A	N/A
NTP Server Address	IP address or host name	(NULL)	N/A	N/A
Polling Interval	Interval for performing time synchronization (1 to 48 hours)	24	N/A	N/A
NTP Server Check	-	-	N/A	N/A
FTP Print Settings				
Use FTP printing	On/Off	On	N/A	N/A
User	User name for FTP server login (24 Characters maximum)	(NULL)	N/A	N/A
Password	Password for FTP server login (24 Characters maximum)	(NULL)	N/A	N/A
Use PASV Mode for FTP				
Use PASV Mode for FTP	On/Off	Off	N/A	N/A
IPP Settings*1				
IPP Settings	On/Off	On	N/A	N/A
Use Authentication	On/Off	Off	N/A	N/A

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
User	User name for IPP authentication (24 Characters maximum)	(NULL)	N/A	N/A
Password	Password for IPP authentication (24 Characters maximum)	(NULL)	N/A	N/A
Use HTTP				
Use HTTP	On/Off	On	N/A	N/A
Proxy Settings*2				
Use Proxy	On/Off	On	N/A	N/A
Server Address	Server name or IP address (128 Characters maximum)	(NULL)	N/A	N/A
Port Number	1 to 65535	80	N/A	N/A
Use Proxy within the Same Domain	On/Off	Off	N/A	N/A
IP Address Range Settings*3				
RX/Print Range: Reject IP Address(es)	Apply Settings: On/Off Up to 8 IP addresses can be stored.	Off	N/A	N/A
RX/Print Range: Permit IP Address(es)	Apply Settings: On/Off Up to 8 IP addresses can be stored.	Off	N/A	N/A
Setting/Browsing Range: Reject IP Address(es)	Apply Settings: On/Off Up to 8 IP addresses can be stored.	Off	N/A	N/A
Setting/Browsing Range: Permit IP Address(es)	Apply Settings: On/Off Up to 8 IP addresses can be stored.	Off	N/A	N/A

*1 This item is available only if the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) or the optional Super G3 FAX Board is installed.

*2 This item is available only if the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) is installed.

*3 This item is available only if either one of the following optional equipment is installed.
- Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N)
- Color Universal Send Kit
- Super G3 FAX Board

■ NetWare Settings

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Cann be set in NetSpot Console
NetWare Settings				
NetWare	On/Off	Off	N/A	N/A
Frame Type	Auto Detect/Ethernet II/ Ethernet 802.2/Ethernet 802.3/ Ethernet SNAP	Auto Detect	✓	✓
IPX External Network Number	Auto Set, display only	-	-	-
Node Number	Auto Set, display only	-	-	-
Packet Signature	Auto Set, display only	-	-	-
Print Service*1	Bindery PServer/RPrinter/NDS PServer/NPrinter	NDS PServer	✓	✓
Bindery PServer Settings*1				
Print Server	47 Characters maximum	(NULL)	✓	✓
File Server	47 Characters maximum	(NULL)	✓	✓
Print Server Password	20 Characters maximum	(NULL)	✓	✓
Service Mode	Service only currently mounted form/ Change forms as needed/ Minimize form changes across print queues/ Minimize form changes within print queues	Minimize form changes within print queues	N/A	✓
Printer Number	0 to 15	0	✓	✓
Polling Interval	1 to 15 seconds	5	✓	✓
Printer Form	0 to 255	0	N/A	✓
Buffer Size	1 to 20 (KB units)	20	N/A	✓
RPrinter Settings*1				
Print Server	47 Characters maximum	(NULL)	✓	✓
File Server	47 Characters maximum	(NULL)	✓	✓
Printer Number	0 to 15	0	✓	✓
NDS PServer Settings*1				
Print Server	64 Characters maximum	(NULL)	✓	✓
Tree	32 Characters maximum	(NULL)	✓	✓
Context	256 Characters maximum	(NULL)	✓	✓

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Cann be set in NetSpot Console
Print Server Password	20 Characters maximum	(NULL)	✓	✓
Service Mode	Service only currently mounted form/ Change forms as needed/ Minimize form changes across print queues/ Minimize form changes within print queues	Minimize form changes within print queues	N/A	✓
Printer Number	0 to 254	0	✓	✓
Polling Interval	1 to 255 seconds	5	✓	✓
Printer Form	0 to 255	0	N/A	✓
Buffer Size	3 to 20 (KB units)	20	N/A	✓
NPrinter Settings*1				
Print Server	64 Characters maximum	(NULL)	✓	✓
Tree	32 Characters maximum	(NULL)	✓	✓
Context	256 Characters maximum	(NULL)	✓	✓
Printer Number	0 to 254	0	✓	✓

*1 This item is available only if the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) or the optional Super G3 FAX Board is installed.

■ AppleTalk Settings*1

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot COnsole
AppleTalk	On/Off	Off	N/A	N/A
Phase	Phase 2 (fixed)	-	✓	✓
Service Name	32 Characters maximum	Model name	N/A	✓
Zone	32 Characters maximum	*	✓	✓

*1 This item is available only if the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) is installed.

■ SMB Settings*1

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Use SMB	On/Off	On	N/A	✓
Server	15 Characters maximum	(NULL)	N/A	✓
Printer	13 Characters maximum	(NULL)	N/A	✓
Workgroup	15 Characters maximum	(NULL)	N/A	✓
Comment	255 Characters maximum	(NULL)	N/A	✓
LM Announce	On/Off	Off	N/A	✓

*1 This item is available only if the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) or the optional Super G3 FAX Board is installed.

■ SNMP Settings

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Use SNMP	On/Off	On	N/A	N/A
Community Name	Community Name	public	N/A	N/A

■ Enable Dedicated Port Settings

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Enable Dedicated Port	On/Off	On	N/A	N/A

■ Spool Settings*1

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Use Spooler	On/Off	Off	N/A	N/A

*1 This item is available only if the optional Color Network Multi-PDL Printer Kit (Standard equipment for the iR C3220N) or the optional Super G3 FAX Board is installed.

■ Startup Time Settings

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Startup Time Settings	0 to 300 seconds	60	N/A	✓

■ Ethernet Driver Settings

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Auto Detect	On/Off	On	N/A	N/A
Communication Mode	Half Duplex/Full Duplex	Half Duplex	N/A	N/A
Ethernet Type	10 Base-T/100 Base-TX	10 Base-T	N/A	N/A
MAC Address	Display only	-	-	-

■ Token Ring Settings*1

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
Ring Speed and Communication Method	Auto Detect/4 Mbps-CTR/ 4 Mbps-DTR/16 Mbps-CTR 16 Mbps-DTR	Auto Detect	N/A	N/A
Maximum Frame Size	14 to 4096	4096	N/A	N/A
Use Source Routing	On/Off	On	N/A	N/A
All Broadcast Request	On/Off	On	N/A	N/A
All Broadcast Response Notice	On/Off	Off	N/A	N/A
LAA Mode	On/Off	Off	N/A	N/A
LAA	40 00 00 00 00 00 to 7F FF FF FF FF FF	00 00 00 00 00 00	N/A	N/A
MAC Address	Display only	-	-	-

*1 This item is available only if the optional Token Ring Network Interface Adapter is installed.

■ E-Mail/I-Fax Settings*1

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
SMTP Receipt	On/Off	On	N/A	N/A
POP	On/Off	On	N/A	N/A
SMTP Server	Server name or IP address (48 Characters maximum)	(NULL)	N/A	N/A
E-mail Address	64 Characters maximum	(NULL)	N/A	N/A
POP Server	Server name or IP address (48 Characters maximum)	(NULL)	N/A	N/A
POP Address	32 Characters maximum	(NULL)	N/A	N/A
POP Password	32 Characters maximum	(NULL)	N/A	N/A
POP Interval	0 to 99 (If the interval is set to "0," the POP server is not checked.)	0	N/A	N/A
Authent./Encryption				
POP Authentication	Standard/APOP/POP AUTH	Standard	N/A	N/A
POP Authentication before Sending	On/Off	Off	N/A	N/A

Item	Setting Description	Default Setting	Can be set in NetSpot Device Installer	Can be set in NetSpot Console
SMTP Authentication (SMTP AUTH)	On/Off	Off	N/A	N/A
User	User name for SMTP authentication (64 Characters maximum)	(NULL)	N/A	N/A
Password	Password for SMTP authentication (32 Characters maximum)	(NULL)	N/A	N/A
Allow SSL (POP)	On/Off	Off	N/A	N/A
Allow SSL (SMTP)	On/Off	Off	N/A	N/A

*1 To use the e-mail/I-fax functions, the optional Color Universal Send Kit, the optional Resolution Switching Board, and the optional Color Image Reader must be installed.

NOTE

Use the control panel of the device or a web browser (Remote UI) to set items which cannot be set using NetSpot Device Installer or NetSpot Console.

Available Software for Network Settings

You can specify the network settings of the machine using the following:

✓=Available –=Unavailable
△=Only some of the items can be set (See "Network Setting Items," on p. 9-2.)

Type of Settings	The Machine's Control Panel	Web Browser (Remote UI)	NetSpot Device Installer	NetSpot Console	NWADMIN/ PCONSOLE
TCP/IP Protocol Settings (See p. 3-3.)	✓	✓	△	△	–
NetWare Print Server Settings (See p. 4-3.)	–	–	✓	✓	✓
NetWare Protocol Settings (See p. 4-9.)	✓	✓	△	△	–
NetBIOS Protocol Settings (See p. 5-3.)	✓	✓	–	△	–
AppleTalk Protocol Settings (See p. 6-4.)	✓	✓	△	△	–

Confirming Settings

You can print a user's data list to confirm the network settings made from the machine's touch panel display.

To print a user's data list, follow the procedure below.

1 **Press ⊛ .**

2 **Press [Report Settings] →[Network] → [User's Data List].**

3 **When a confirmation screen appears on the touch panel display, press [Yes].**

The user's data list is printed.

Viewing the Network Access Log

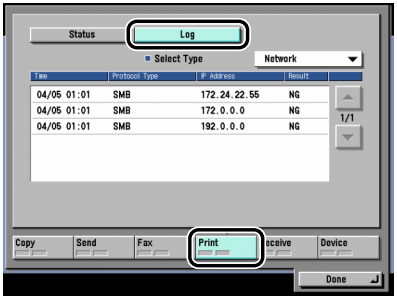
This machine logs attempts to gain access from IP addresses that it has been set to reject. The procedure for referring to the access log is as follows.

NOTE

For instruction on how to set the machine to permit or reject specific IP addresses, see step 21 in "TCP/IP Settings," on p. 3-4.

1 Press [System Monitor].

2 Press [Print] →[Log].



3 Select [Network] from the drop-down list.

The log pertaining to the rejected IP addresses is displayed.

NOTE

- *Up to 100 logs can be displayed.*
- *You can export the log to a CSV format file, using the Remote UI. For instructions, see the Remote UI Guide.*

Specifications

Specifications are subject to change without notice.

Ethernet Interface Adaptor

Hardware Specifications

Network Interface	10Base-T/100Base-TX (RJ-45)

Software Specifications

Protocol Supported		
TCP/IP	Frame type: Print applications:	Ethernet II LPD/Raw/IPP
IPX/SPX	Frame type: Print applications:	Ethernet II/Ethernet 802.2/Ethernet 802.3/ Ethernet SNAP/Auto Detect Bindery PServer/NDS PServer/RPrinter/ NPrinter/LPD/IPP
NetBIOS	Frame type: Print application:	Ethernet II SMB
AppleTalk	Frame type: Print application:	Ethernet SNAP PAP (Printer Access Protocol)

Token Ring Network Interface Adaptor

Hardware Specifications

Network Interface	4/16 Mbps Token Ring (RJ-45, DB-9)

Software Specifications

Protocol Supported		
TCP/IP	Frame type: Print applications:	Token Ring SNAP LPD/Raw/IPP
IPX/SPX	Frame type: Print applications:	Token Ring SNAP/Token Ring 802.2/Auto Detect Bindery PServer/NDS PServer/RPrinter/ NPrinter/LPD/IPP
NetBIOS	Frame type: Print application:	Token Ring SNAP SMB

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